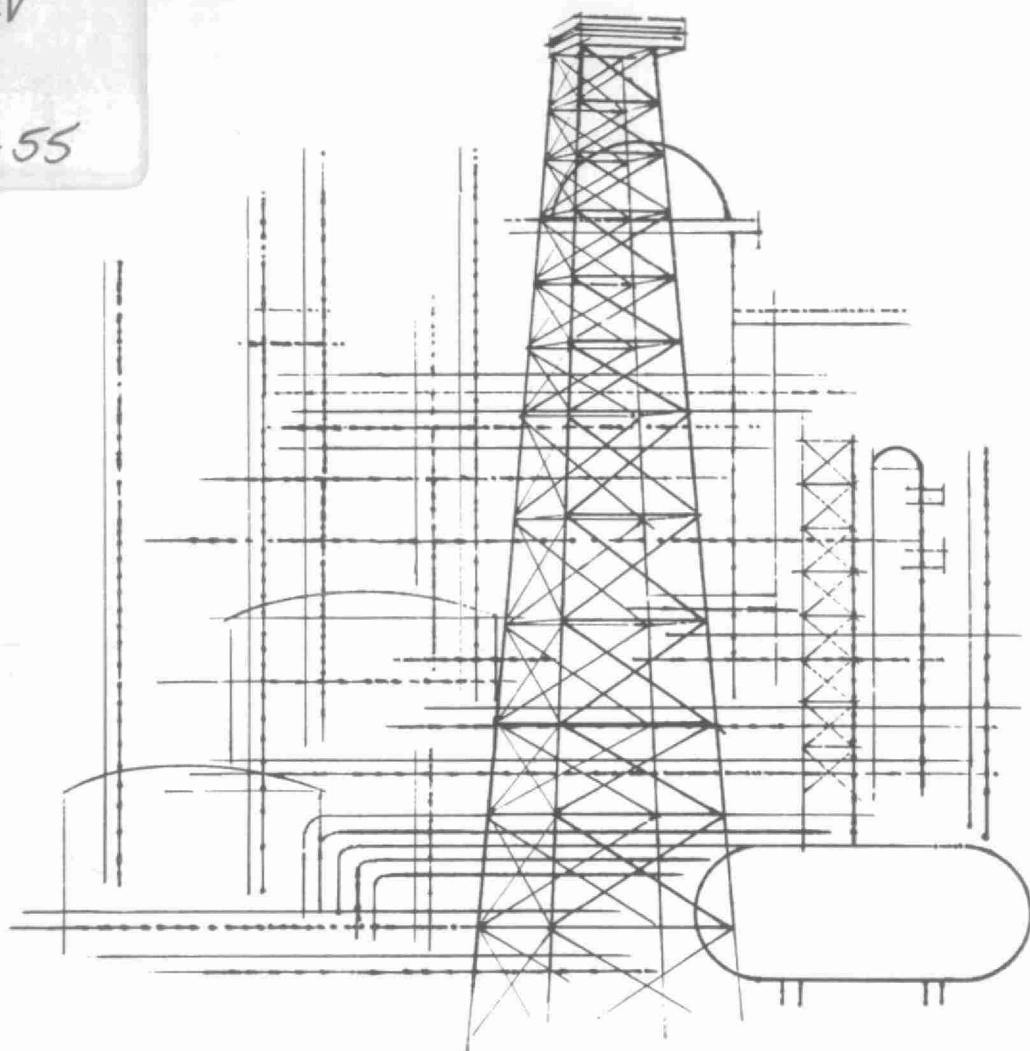


CA20N  
EV

A55

4.11.71.  
c2



annual report  
of the  
**Department of Energy Resources**  
**1963**

Copyright Provisions and Restrictions on Copying:

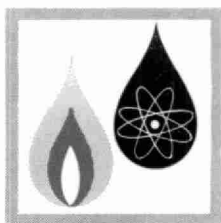
This Ontario Ministry of the Environment work is protected by Crown copyright (unless otherwise indicated), which is held by the Queen's Printer for Ontario. It may be reproduced for non-commercial purposes if credit is given and Crown copyright is acknowledged.

It may not be reproduced, in all or in part, for any commercial purpose except under a licence from the Queen's Printer for Ontario.

For information on reproducing Government of Ontario works, please contact ServiceOntario Publications at [copyright@ontario.ca](mailto:copyright@ontario.ca)



annual report  
of the  
**Department of Energy Resources**  
for the calendar year  
**1963**



HON. J. R. SIMONETT, Minister

T. R. HILLIARD, Deputy Minister



THE HONOURABLE J. R. SIMONETT  
Minister of Energy Resources



## Introduction

The Department of Energy Resources as presently constituted came into existence on September 1, 1960, with the proclamation of The Energy Act. Therefore, this Annual Report, though being the fourth published by the Department, actually covers the third calendar year of operation which ended on December 31, 1963.

Much has been accomplished in the interval to provide more effective regulation of the drilling for and the production of oil and gas, the transmission and storage of gas, and the distribution and utilization of gas, propane and fuel oil. The Acts, the Regulations and the Codes have been improved and expanded in keeping with the greatly increased usage of hydrocarbon fuels.

This report is mainly statistical, with some explanatory and descriptive material, and includes the logs of all wells drilled during the year. In general format it is similar to the Annual Reports of the Ontario Fuel Board for the years 1954 to 1959 inclusive, and to that Part of the Annual Report of the Ontario Department of Mines prepared by the Natural Gas Commissioner in the years prior to 1954.

One copy of this Report, while current, is supplied free of charge to all 1963 licensees and permittees, and to libraries, educational institutions and other interested parties on our permanent mailing list. Additional copies are available at 50¢ each. Copies of Reports for previous years may be obtained for \$1.00 each.

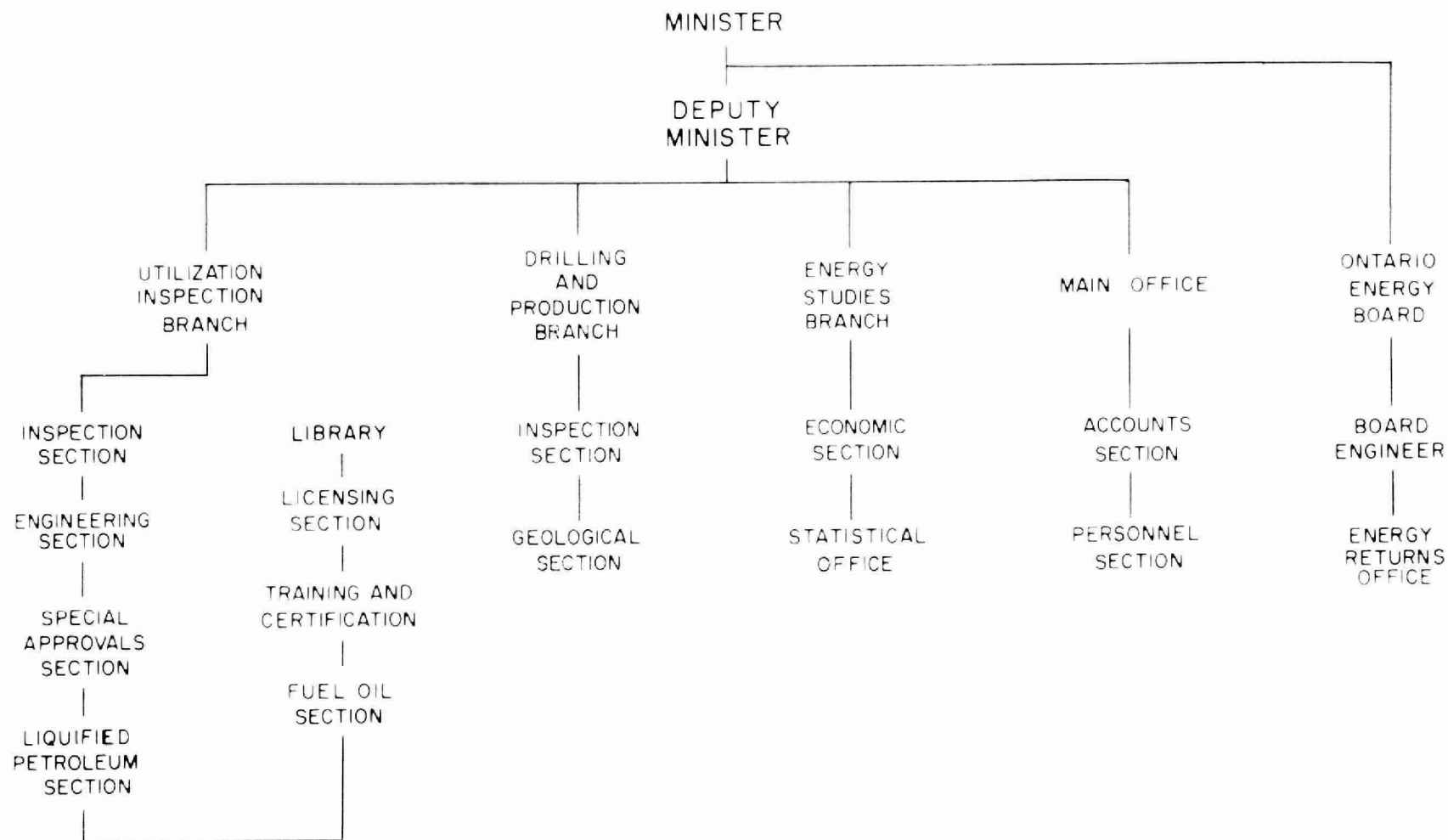
## TABLE OF CONTENTS

|  | PAGE |  | PAGE |
|--|------|--|------|
| Introduction . . . . .                       | 3    | Summary . . . . .                            | 23   |
| Organization Chart . . . . .                 | 5    | Geophysical and Geochemical                  |      |
| Branch Reports . . . . .                     | 6    | Exploration . . . . .                        | 24   |
| Part I — Utilization Inspection              |      | Leasing . . . . .                            | 25   |
| Branch . . . . .                             | 6    | Drilling . . . . .                           | 30   |
| Inspection Section . . . . .                 | 6    | General . . . . .                            | 30   |
| Appliance Approvals Section . . . . .        | 7    | Exploratory Drilling . . . . .               | 31   |
| Liquefied Petroleum Section . . . . .        | 8    | Development Drilling . . . . .               | 32   |
| Training and Certification Section . . . . . | 8    | The Clearville Field . . . . .               | 40   |
| Fuel Oil Section . . . . .                   | 9    | Introduction . . . . .                       | 40   |
| Part II — Energy Studies Branch . . . . .    | 10   | Stratigraphy . . . . .                       | 40   |
| Part III — Drilling and                      |      | Structure . . . . .                          | 41   |
| Production Branch . . . . .                  | 10   | Drilling and Production . . . . .            | 42   |
| Foreword . . . . .                           | 10   | Reservoir Rocks . . . . .                    | 43   |
| Section 1 — Natural Gas . . . . .            | 10   | Conclusions . . . . .                        | 43   |
| General . . . . .                            | 10   | Acknowledgements . . . . .                   | 44   |
| Wells and Production . . . . .               | 13   | Selected Bibliography . . . . .              | 44   |
| Lake Erie . . . . .                          | 15   | Section 4 — Logs of Wells for 1963 . . . . . | 45   |
| Gas Storage . . . . .                        | 15   | Introduction . . . . .                       | 45   |
| Section 2 — Oil Production . . . . .         | 16   | Abbreviations . . . . .                      | 45   |
| Section 3 — Exploration and                  |      | Geological Logs . . . . .                    | 46   |
| Drilling . . . . .                           | 23   |  |      |

## LIST OF TABLES

|  | PAGE    |
|--|---------|
| I Gas Balance Sheet . . . . .  | 11      |
| II Ontario Natural Gas Production by Fields and Townships . . . . .    | 12      |
| III Lake Erie Gas Wells and Production . . . . .                       | 15      |
| IV Licensed Producers . . . . .  | 17      |
| V Ontario Oil Fields, Wells and Production . . . . .                   | 22      |
| VI Oil Production in Ontario, 1959 to 1963 . . . . .                   | 23      |
| A Licence to Conduct Geophysical and Geochemical Exploration . . . . . | 24      |
| B Geochemical and Geophysical Activity . . . . .                       | 25      |
| C Persons Licenced to Lease Oil and Gas Rights . . . . .               | 26      |
| D Acreage Acquired on Land . . . . .                                   | 30      |
| E Summary of Well Completions . . . . .                                | opp. 32 |
| F Lake Erie Drilling . . . . .   | 34      |
| G Drilling Summary by Depth . . . . .                                  | 34      |
| H Success Ratios . . . . .   | 34      |
| I Owners of Licensed Drilling Machines . . . . .                       | 35      |
| J Holders of Well Permits . . . . .                                    | 36      |
| K Successful Exploratory Tests . . . . .                               | 38      |
| L Important Dry Exploratory Tests . . . . .                            | 39      |
| Index of Gas and Oil Fields . . . . .                                  | 33      |
| Map — Gas and Oil Fields in Southwestern Ontario . . . . .             | opp. 33 |

# DEPARTMENT OF ENERGY RESOURCES



This Branch is headed by a Director and is divided into five sections:

1. **An Inspection Section** which is concerned with pipeline construction, the operation of utilities, and the inspection and installation of appliances,
2. **An Appliance Approvals Section,**
3. **A Liquefied Petroleum Section,**
4. **A Training and Certification Section,**
5. **A Fuel Oil Section.**

Each Section has responsibilities as follows:

**1. Inspection Section**

- (a) Inspecting and checking all gas utilities to ensure that utilities are adequately inspecting their own installations and that those made by registered contractors comply with standards set up under the Act and the Regulations thereunder;
- (b) To inspect and ensure that the provisions of The Energy Act and Regulations thereunder are complied with to ensure safe and adequate standards of construction, design, maintenance and operation of pipe lines;
- (c) Making spot inspections of gas and oil appliances, including piping and venting thereof, installed by gas utilities and registered contractors;
- (d) Co-operating with and assisting municipal and provincial government departments in the interpretation and enforcement of the installation codes and regulations in order to effect the maximum public safety;
- (e) Inspecting and reporting on accidents involving the use of fuels which come within the scope of The Energy Act and Regulations.

With respect to **appliance approval**, Ontario Regulation 24/62 was enacted on January 26, 1962. This regulation details the Ontario Government policy regarding the approval of fuel burning appliances for use within the Province.

The requirements of this particular regulation are summarized as follows:

1. The Canadian Gas Association is designated as an agency to test all gas appliances.
2. The Canadian Standards Association and the Underwriters' Laboratories of Canada are designated as agencies to test gas appliances having an input greater than 400,000 BTU per hour.
3. The C.G.A., the C.S.A., and the Underwriters' Laboratories of Canada

are designated as agencies to test appliances designed to burn both gas and fuel oil, either together or separately.

4. The C.S.A. and Underwriters' Laboratories of Canada are designated as agencies to test fuel oil appliances.

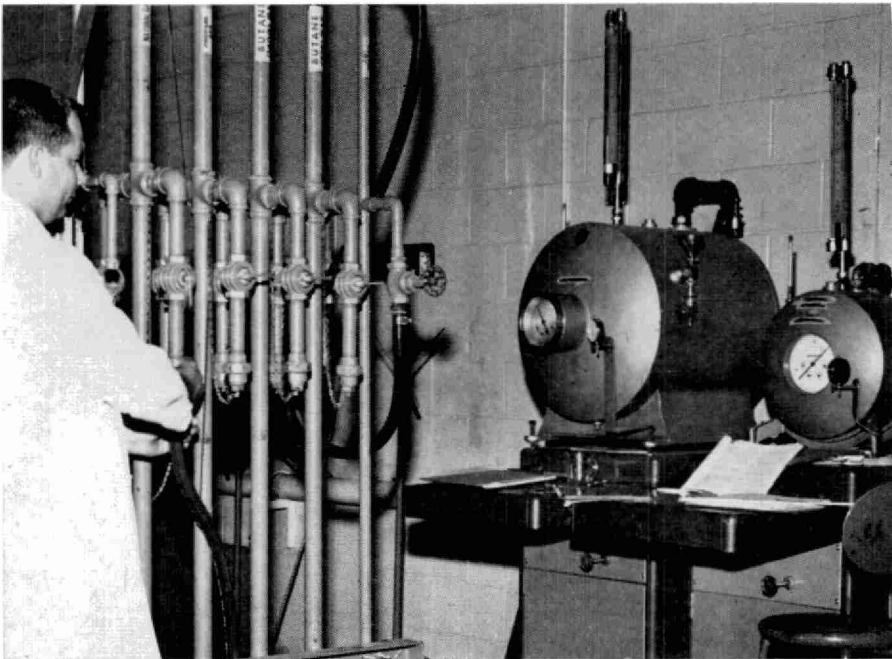
The agencies will test appliances in accordance with the requirements of specifications approved by the Minister, the titles of which have been published by the Department.

## **2. Appliance Approvals Section**

Where no specification is available, the Department will examine, test and provide the label, if necessary, through the Appliance Approvals Section. The Department is required to inspect and, where applicable, to label gas appliances which have not been tested and certified by a designated testing organization.

These appliances fall into two groups:

- (1) Those for which specifications are not found in the Titles of Specifications approved by the Minister.
- (2) Those for which the cost of a laboratory test would be prohibitive.



C.G.A. Testing Laboratory

The following program is carried out by the Section:

- i Inspection of appliances not certified by the Section.
- ii Supervision of the field testing of appliances of larger sizes, larger fuel inputs and those of a special nature.
- iii Compilation of data from laboratory test requirements, safety codes, and recognized good industry practice for the use of our staff in the field.
- iv Participation with industry in committee meetings to prepare test procedures, minimum safety requirements and recommended good practice manuals for the use of industry.
- v Study of drawings and diagrams of proposed appliance design and construction with a view to labelling.
- vi Spot inspections of certified appliances in the field to ensure compliance with requirements of specifications approved by the Minister.
- vii Co-operation with and assistance to other Government Departments and testing agencies in the interpretation of specifications.

### **3. Liquefied Petroleum Section**

The Department is required to licence all persons who distribute and transfer liquefied petroleum gases.

During 1963 the Department issued 436 licences to distribute L.P.G. and 135 licences to transfer L.P.G.

With certain amendments, Part 3 of Canadian Standards Association B149-1962 Installation Code for Gas Burning Appliances and Equipment has been part of the regulation covering storage, handling and use of L.P.G. in Ontario.

### **4. Training and Certification Section**

The Department is required to examine applicants as Gas Fitters, Maintenance Gas Fitters and Pipeline Inspectors.

Successful applicants are provided with Certificates indicating their qualifications.

In order to assist these prospective applicants, a program has been set up to provide instruction relating to the various codes and regulations which must be followed in carrying out these functions. This training has been made available in Toronto and throughout the province.

In addition, a night course of 22 weeks' duration including examinations for Gas Fitters has been set up in co-operation with the Provincial Institute of Trades.

During the year, the Branch issued licences to 518 Gas Fitters, 41 Maintenance Gas Fitters, 98 Pipeline Inspectors and 169 Liquefied Petroleum Gas Fitters. There were 2,850 Registration Certificates issued to contractors who install, service or remove fuel burning equipment.

## 5. Fuel Oil Section

The Department is required to register all persons who carry on the business of installing, removing or servicing fuel oil burning appliances.

The Canadian Standards Association B139-1957 Installation Code for Oil Burning Equipment is incorporated in the Regulations as the standard for oil-fired installations.

Three Licences to Distribute Fuel Oil were issued during the year pursuant to Section 5(1) (c) of the Energy Act.



Exhibit at Canadian National Exhibition 1963

This Branch is responsible for the preparation of the energy forecasts and all other economic information which is required by the Department. The departmental statistician works in conjunction with this Branch.

The Branch issues at regular intervals a statistical report showing the production of oil and natural gas in the Province as well as detailed monthly figures on the consumption, transmission, and storage of natural gas. Personnel attended a number of meetings of the Federal-Provincial Committee on Oil and Gas Statistics. A member of the Branch attended a number of Hearings of the National Energy Board in cases where the interests of the Province of Ontario were involved.

#### **FOREWORD**

The Drilling and Production Division of the Energy Branch administers the portions of the Energy Act and the Regulations thereunder which deal with the drilling for and production of gas and oil, including functions such as leasing oil and gas rights, and geophysical and geochemical prospecting.

Probably the most interesting aspect of the 1963 activities administered by the Drilling and Production Division were the 19 successful exploratory tests. Fifteen found Silurian gas, 2 found Silurian oil and 2 found Cambrian oil. Eleven of the 15 gas discoveries were in eastern Lake Erie. At the time of writing, insufficient development drilling has been done to evaluate any of the 19 discoveries.

Important developments in 1963 were an increase of 11 percent in gas production from Lake Erie of which Haldimand county offshore output more than offset declines in other lake wells, and an increase of less than two percent over 1962 from all gas pools due to decreases mainly in some Lambton and Kent county wells. Crude oil production increased 6 percent mainly from the new Clearville field, discovered in Kent county during 1962.

---

### **SECTION 1 — NATURAL GAS**

---

#### **General**

A statistical outline of the natural gas industry in Ontario during 1963 is presented in the Gas Balance Sheet at Table I hereunder.



TABLE I — GAS BALANCE SHEET, 1963

|                               |             | Thousands<br>Cubic Feet * |       |
|-------------------------------|-------------|---------------------------|-------|
| <b>SUPPLY</b>                 |             |                           |       |
| Ontario Production.....       |             | 15,920,055                | 8.7   |
| Imports from:                 |             |                           |       |
| Western Provinces.....        | 161,063,348 |                           | 87.7  |
| United States.....            | 6,693,136   | 167,756,484               | 3.6   |
| Propane — air.....            |             | 3,978                     |       |
| Total Supply.....             |             | 183,680,517               | 100.0 |
| <b>DISPOSITION</b>            |             |                           |       |
| <b>Sales</b>                  |             |                           |       |
| Residential.....              | 62,027,902  |                           |       |
| Commercial.....               | 22,439,257  |                           |       |
| Industrial.....               | 83,221,305  |                           |       |
| Total Sales to Consumers..... |             | 167,688,464               | 91.3  |
| Free Gas.....                 | 60,080      |                           |       |
| Company Use.....              | 7,369,309   | 7,429,389                 | 4.1   |
| Total Consumption....         |             | 175,117,853               |       |
| Gas to Storage (net).....     | 1,823,119   |                           | 1.0   |
| Gas to Hull, Que.....         | 1,321,505   |                           | 0.7   |
| Exports to U.S.A.....         | 1,686,767   |                           | 0.9   |
| Unaccounted for.....          | 3,731,273   | 8,562,664                 | 2.0   |
| Total Disposition.....        |             | 183,680,517               | 100.0 |

\* at 14.73 psia.

Total natural gas receipts advanced 19 percent over 1962 mainly due to continued annual increases in Western gas inflow. Production from wells in Ontario increased nearly 2 percent over 1962 accounting for approximately 9 percent of total consumption. The portion of total demand for gas met by Ontario production continued its relative decline since 1954, which trend probably will accompany increasing gas sales in the province. While Western gas was the major source of supply, imports from the U.S.A. advanced more than 20 percent mainly to help meet the sales increase of 16 percent during the peak months of the first quarter.

Total net consumption increased by more than 16 percent over 1962. Percent increases in sales by categories of customers were residential 12, commercial 19, and industrial 11.

Other significant points at Table I were increases in gas placed in storage, in exports to the United States at Cornwall and, in company, mainly in compressor stations currently being augmented to handle the increasing transmission of Western gas.

TABLE II—ONTARIO NATURAL GAS PRODUCTION BY FIELDS, 1963

| County | Field or Pool  | Township       | Formation     | Wells       |                | Average<br>Daily<br>Production<br>in cu ft | Production<br>in cu ft |
|--------|----------------|----------------|---------------|-------------|----------------|--|------------------------|
|        |                |                |               | Shut-<br>In | Pro-<br>ducing |  |                        |
| North  | Cowal          | Danforth       | Salina-Guelph | —           | 3              | 485  | 23,320                 |
|        | Eden           | Morton         | Clinton       | 10          | 29             | 130  | 26,320                 |
|        | Richmond       |                |               |             |                |  |                        |
|        | Vernon         | Langton        | Clinton       | 10          | 29             | 130  | 26,320                 |
|        | Polkwood       | Morton         | Salina        | 3           | 6              | 385  | 32,370                 |
|        | Townline       |                |               |             |                |  |                        |
| East   | Woodburn       |                | Salina        | —           | 1              | —  | —                      |
|        | Elmville       | Lake Erie      | Guelph        | 4           | —              | —  | —                      |
|        | Windsor        | Georgetown     |               | 15          | 8              | 270  | 14,550                 |
|        | Leamington     | Morton         |               | —           | 2              | 235  | 1,377                  |
|        | Beaconsfield   | Tilbury West   |               | 5           | 1              | —  | 432                    |
|        | Windsor        | Morton         |               | 5           | —              | —  | —                      |
| West   | Windsor        | Lake Erie      | Irondequoit   | 19          | 70             | 345  | 1,236,430              |
|        | All townships  | All townships  | Thorold       | 36          | 761            | 132  | 48,644                 |
|        |                |                | Goderich      |             |                |  |                        |
|        |                |                | Whitpool      |             |                |  |                        |
|        | Tilbury        | Tilbury        | Guelph        | —           | 15             | —  | —                      |
|        | Georgetown     | Georgetown     |               | 17          | 51             | 70   | 3,564                  |
| South  | Georgetown     | Georgetown     |               | —           | 3              | 70   | —                      |
|        | Windsor        | Windsor        | Gull River    | —           | 15             | 220  | 41,257                 |
|        | Windsor        | Windsor        |               | 2           | 1              | 300  | 1,200                  |
|        | Windsor        | Windsor        | Guelph        | —           | 2              | 220  | 180,000                |
| North  | Windsor        | Windsor        | Salina        | 5           | —              | 800  | —                      |
|        | Windsor        | Windsor        | Salina        | 3           | 13             | 377  | 71,565                 |
|        | Windsor        | Windsor        | Salina-Guelph | —           | 25             | 400  | 110,000                |
|        | Windsor        | Windsor        | Salina        | 2           | —              | 713  | —                      |
|        | D'Arcy         | Lake Erie      | Guelph        | 7           | 10             | 405  | 400,000                |
|        | D'Arcy         | Salina         | Guelph        | 2           | 17             | 252  | 74,377                 |
| East   | Dover          | Dover          | Trenton       | 6           | 5              | 180  | 34,451                 |
|        | Windsor        | Windsor        | Guelph        | 3           | 4              | —  | 115,000                |
|        | Windsor        | Windsor        |               | 1           | 4              | —  | 75,000                 |
|        | Lake St. Clair | Lake St. Clair |               | —           | 4              | —  | 7,000                  |
|        | Windsor        | Lake Erie      | Salina        | —           | 4              | 270  | 7,000                  |
|        | Windsor        | Windsor        | Guelph        | 1           | 11             | 230  | 144,377                |
| South  | Tilbury        | Lake Erie      | Guelph        | 16          | 73             | 275  | 1,400,000              |
|        | Tilbury        | Tilbury        |               | —           | 184            | 135  | 499,377                |
|        | Tilbury        | Tilbury E.     |               | —           | 1              | 710  | 1,710                  |
|        | Windsor        | Windsor        | Guelph        | —           | 1              | 710  | 1,710                  |
|        | Windsor        | Windsor        |               | 1           | 67             | 300  | 20,000                 |
|        | Windsor        | Windsor        | Guelph        | —           | 1              | 710  | 1,710                  |

|                            |                  |                 |                                |       |     |            |
|----------------------------|------------------|-----------------|--------------------------------|-------|-----|------------|
| Becher, East..             | } Sombra.....    |                 | 1                              | 1     | 183 | 39,277     |
| Becher, West..             |                  |                 | 3                              | 9     | 261 | 345,900    |
| Bickford.....              |                  |                 | 10                             | 3     | 429 | 2,039,919  |
| Colinville-                |                  |                 |                                |       |     |            |
| Kimball....                | } Moore.....     |                 | 16                             | 4     | 217 | 1,348,056  |
| Corunna.....               |                  |                 | 2                              | 11 ** | 447 | 204,050    |
| Dawn Misc....              | } Dawn.....      | } Salina-Guelph | 14                             | 4     | —   | 96,247     |
| Lambton... Dawn 156....    |                  |                 | 6                              | 9     | 582 | 3,188,461  |
| Dawn 167....               |                  |                 |                                |       |     |            |
| Dawn-                      |                  |                 |                                |       |     |            |
| Enniskillen....            |                  |                 | 5                              | —     | 848 | —          |
| Enniskillen                |                  |                 |                                |       |     |            |
| 26 & 28....                | Enniskillen..... |                 | 3                              | —     | 796 | —          |
| Mandaumin....              | Plympton.....    |                 | —                              | 1     | 195 | 221,755    |
| Seckerton....              | Moore.....       |                 | 2                              | 11 ** | 417 | 934,093    |
| Sombra.....                | Sombra.....      |                 | 2                              | 1     | 465 | 119,140    |
| <hr/>                      |                  |                 |                                |       |     |            |
| Middlesex.. Wardsville.... | Mosa.....        | Salina-Guelph   | —                              | 20    | 310 | 114,041    |
| <hr/>                      |                  |                 |                                |       |     |            |
| Norfolk.... Norfolk.....   | { Lake Erie..... | } Irondequoit.. | 25                             | 10    | 323 | 148,959    |
|                            |                  |                 | { All townships..              | 40    | 554 | 239        |
| <hr/>                      |                  |                 |                                |       |     |            |
| Oxford.... Gobles.....     | Blenheim.....    | Eau Claire...   | 1                              | 9     | 202 | 82,207     |
| Norwich South..            | South Norwich... | Irondequoit..   | —                              | 6     | 275 | 16,352     |
| <hr/>                      |                  |                 |                                |       |     |            |
| Welland.... Welland.....   | } Lake Erie..... | } Irondequoit.. | 3                              | 1     | 180 | 5,558      |
|                            |                  |                 | { All townships..              | 144   | 479 | 80         |
| <hr/>                      |                  |                 |                                |       |     |            |
| GRAND TOTALS.....          |                  |                 | 442                            | 2,449 | —   | 15,920,055 |
| <hr/>                      |                  |                 |                                |       |     |            |
| *At 14.73 psia.            |                  |                 | **Solution gas from oil wells. |       |     |            |

## Wells and Production

The sources of gas produced from Ontario wells is shown in maximum possible detail at Table II, including field or pool name, location, producing formation, number of wells and measured or estimated field pressures. While all known pools of commercial value are shown, the shut-in wells listed include some having important productive potential. Comparison of Table II with that for 1962 reflects certain changes some of which are important.

In Elgin county, the pools in Aldborough and Dunwich townships produced substantially greater quantities over 1962, resulting from their reactivation during that year. The older Bayham township pools produced 30 percent less gas than in 1962 accompanying a decrease in active producing wells. In Essex

county, apart from a minor increase from the Kingsville field land wells, the normal decline in production from these nearly depleted wells continued, particularly in the Staples field.

Production from the Haldimand field was an outstanding increase of more than 60 percent over 1962 thereby maintaining its historic position as a major source of natural gas in the province. The bulk of this increase was from off-shore wells connected to the on-shore system during 1962. In addition, 11 out of 15 test wells drilled in Lake Erie near Selkirk, Haldimand county, and Port Burwell, Norfolk county, were successful and, subject to further drilling to determine commercial significance, should contribute to future offshore production. Production from Haldimand land wells was only a minor decrease over 1962 despite the closing in of many wells for non-productiveness.

Halton and Huron counties showed slight increases particularly in the former, where the Hornby field was brought into production during the year.

Lambton and Kent counties contributed over 70 percent of total 1963 production, being a decline from over 75 percent for 1962. Dawn 156 maintained its position as the largest single source with an increase exceeding 4 percent over 1962. D'Clute and Tilbury offshore wells also continued as strong producers with an increase of 11 percent in the former and a minor increase in the latter field over 1962. Offshore Morpeth wells also had an 11 percent production increase. While Tilbury land wells more than doubled their 1962 production, there were decreases in all other fields in Kent county. Except for increases of 35 percent in the Colvinville-Kimball field and of 22 percent in the smaller Dawn fields, other Lambton fields also had production decreases. A gas discovery during the year was a possible reef in Sombra township, Lambton county, which requires further drilling to determine commercial potential.

The Wardsville pool in Middlesex counties continued its trend of decreasing production.

Norfolk county was an area of substantial exploration and development activity during 1963. While offshore wells produced less gas than in 1962, the number of wells increased considerably and, with further development, should result in correspondingly greater production. On land, production advanced with more active wells while some non-producers were closed off. Three new pools were found on land which require further drilling to assess commercial value. Continuation of drilling activities in the Norfolk field should further prove its potential as a major gas producing area.

Oxford county wells produced considerably less than in 1962 particularly in the Gobles field. In the Welland fields, there were decreases in both offshore and land production.

TABLE III — LAKE ERIE GAS WELLS AND PRODUCTION, 1963

| County      | Field or Pool        | Wells   |        | Average<br>W.H.P.<br>p.s.i.g. | Production<br>Mcf.* |
|-------------|----------------------|---------|--------|-------------------------------|---------------------|
|             |                      | Shut-in | Active |                               |                     |
| Essex       | Kingsville, etc..... | 4       | —      | 359                           | —                   |
| Kent        | D'Clute.....         | 7       | 10     | 465                           | 605,400             |
|             | Morpeth.....         | —       | 4      | 376                           | 59,870              |
|             | Tilbury East.....    | 16      | 73     | 275                           | 1,460,055           |
| Haldimand   | Haldimand.....       | 19      | 70     | 300                           | 1,253,455           |
| Norfolk     | Norfolk.....         | 25      | 10     | 320                           | 148,959             |
| Welland     | Welland.....         | 3       | 1      | 180                           | 5,558               |
| TOTALS..... |                      | 74      | 168    |                               | 3,533,297           |

\*at 14.73 p.s.i.g.

## Lake Erie

Production activities in Lake Erie appears at Table III which consolidates similar details appearing in Table II.

The number of active wells declined slightly but total wells off Haldimand and Norfolk counties advanced considerably from the increased exploratory and drilling activities during the year. Production increases of over 60 percent in the Haldimand field, 11 percent in Morpeth and 10 percent in D'Clute more than offset decreases in other offshore fields. While Norfolk production was a decline of 13 percent over 1962, the advance of 50 percent in total wells in that field should, subject to further testing, augment offshore production as well as the proven reserves under the Lake.

## Gas Storage

The Province's incomparable gas-storage fields continued in 1963 to play a most significant role in the mechanics of gas distribution to our 623,000 consumers.

During the year, the Zone field was designated as a gas-storage area, and gas-storage was authorized by Board Order in the Corunna, Seckerton and Kimball-

Colinville pools. Thus at year's end there were 9 designated and authorized gas-storage pools, 5 of them in use, and 3 more designated but not yet authorized. The pools in use are operated by the Union Gas Co. of Canada and its storage subsidiary, while the 3 newly-authorized pools in Moore township are to be operated by Tecumseh Gas Storage Limited, a jointly owned subsidiary of Imperial Oil Limited and Consumers' Gas Co., with injection planned for June, 1964.

The end of the injection season saw a total 65.1 billion cubic feet of gas in the 6 pools, including cushion gas, in preparation for the 1963-1964 heating season. That season being below average in severity, the net withdrawal to the end of April, 1964, was only 24.4 billion cubic feet.

---

## **SECTION 2 – OIL PRODUCTION**

---

Crude oil produced from Ontario wells was 6 percent greater than during 1962. The new Clearville field more than doubled its production over that in 1962 when first discovered. Gobles production increased 5 percent and, combined with Clearville, these two Cambrian fields produced about one-third of the 1963 total. Rodney field maintained its position as the major producer despite a 7 percent decrease over 1962 and contributed nearly 20 percent of the total.

Significant variations in the volumes of oil produced by the other major fields were as follows: Colchester declined by 35 percent, Malden 23 percent, Becher 15 percent, Wanstead 11 percent and Grand Bend 43 percent. These declines were partially offset by increases of 36 percent in Dawn, 21 percent in Oil Springs and 6 percent in Petrolia.

There were actually five oil discoveries during the year. Two were of Cambrian age, one near Duart in Kent County and the other near Verschoyle in Oxford County. The Duart well has since been abandoned because of mechanical difficulties, and no further drilling has been done at Verschoyle. Two other discoveries, both of Silurian age, were in Lambton County, one near Brigden and the other in the Sutorville area. In both cases, a commercial potential has been established and development is proceeding. The fifth "discovery" was of Ordovician oil in a development well in the Clearville pool. Since production rapidly declined, the pay was cemented and the well completed in the Cambrian. For the above reasons, the well in question was not accorded "successful exploratory test" status in our Tabulation of Drilling in Section 3.

Imperial Oil Co. continues as the only purchaser of Ontario's crude oil production. Prices per barrel f.o.b. Imperial's Sarnia refinery in January 1963

were \$3.41 for Essex Ordovician crude, \$3.32 for Gobles and \$3.24 for all other. A decrease of four cents per barrel for all crude occurred in February, with a further reduction of 3 cents in Rodney crude. Based on these prices, the total delivered value of Ontario crude production was about \$3,840,000 for an average of \$3.18 per barrel. With an estimated deduction for transportation of 37¢ per barrel, the total value at wellhead would be approximately \$3,394,000.

There were 64 oil producers in 1963; along with the gas producers, they are listed in Table IV. Table V lists 1963 production and Table VI, a five-year period.

The following tabulation indicates the trend to a greater proportion of production from the deeper horizons.

|                 | 1959   | 1960   | 1961   | 1962   | 1963   |
|-----------------|--------|--------|--------|--------|--------|
| Devonian.....   | 38.1   | 36.3   | 41.5   | 33.9   | 31.3   |
| Silurian.....   | 56.5   | 44.8   | 43.3   | 36.5   | 31.5   |
| Ordovician..... | 5.4    | 18.6   | 9.6    | 8.2    | 5.2    |
| Cambrian.....   | —      | .3     | 5.6    | 21.4   | 32.0   |
|                 | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |

TABLE IV — LICENSED PRODUCERS, 1963

| NAME                                      | ADDRESS             |
|---|---------------------|
| A.C. Gas Syndicate.....                   | Ridgeway, Ont.      |
| Addison, W.....                           | Jarvis, Ont.        |
| Albino Gas Ltd.....                       | Toronto, Ont.       |
| Allegany Producing Corporation.....       | Wellsville, N.Y.    |
| Anchor Petroleums Ltd.....                | Toronto, Ont.       |
| Annett, R.....                            | Bothwell, Ont.      |
| Anthony Gas and Oil Explorations Ltd..... | Acton, Ont.         |
| Arno Mines Ltd.....                       | Toronto, Ont.       |
| Atkinson, J.....                          | Petrolia, Ont.      |
| Barnett, A. D.....                        | Wichita, Kansas     |
| Beacon Gas Syndicate.....                 | Fort Erie, Ont.     |
| Ben Brae Co. Ltd.....                     | Hamilton, Ont.      |
| Bengal Development Corp. Ltd.....         | Toronto, Ont.       |
| Benner, K. W.....                         | Fisherville, Ont.   |
| Bertie Oil and Gas Ltd.....               | Toronto, Ont.       |
| Big Seven Gas Syndicate.....              | Fisherville, Ont.   |
| Bluewater Oil and Gas Ltd.....            | Calgary, Alta.      |
| Bolivar Gas Co.....                       | Bolivar, N.Y.       |
| Bova Gas and Development Co.....          | Buffalo 2, N.Y.     |
| BP Exploration Canada Ltd.....            | London, Ont.        |
| Bradley, M.....                           | Petrolia, Ont.      |
| Booth, A.....                             | Niagara Falls, Ont. |

TABLE IV — LICENSED PRODUCERS, 1963 — *Continued.*

| NAME                                     | ADDRESS             |
|--|---------------------|
| Brennan, R. J.....                       | Bradford, Pa.       |
| British American Oil Co.....             | Toronto, Ont.       |
| Buck, C. S. Estate.....                  | London, Ont.        |
| Byers, Bros.....                         | Oil Springs, Ont.   |
| Byers, I.....                            | Petrolia, Ont.      |
| Camerina Petroleum Corp.....             | Toronto, Ont.       |
| Canadian Kewanee Ltd.....                | Calgary, Alta.      |
| Canada Cities Service Petroleum Ltd..... | Calgary, Alta.      |
| Cango Development Ltd.....               | Buffalo 16, N.Y.    |
| Can-York Prospecting Syndicate.....      | Fort Erie, Ont.     |
| Caughell Bros.....                       | Dunnville, Ont.     |
| Central Pipe Line Co. Ltd.....           | Aylmer, Ont.        |
| Colborne Gas Syndicate.....              | Stevensville, Ont.  |
| Cole, L.....                             | Petrolia, Ont.      |
| Colonial Petroleum Ltd.....              | Chatham, Ont.       |
| Comfort, N. E.....                       | Chatham, Ont.       |
| Consolidated West Petroleum Ltd.....     | Toronto, Ont.       |
| Consumers Gas Co.....                    | Toronto, Ont.       |
| Copeland, Mrs. R.....                    | Petrolia, Ont.      |
| Coronation Gas Syndicate.....            | Stevensville, Ont.  |
| Cornerstone Investment Corp. Ltd.....    | Toronto, Ont.       |
| D. and M. Syndicate.....                 | Fort Erie, Ont.     |
| Daubaris, F.....                         | Dunnville, Ont.     |
| Dawson, R.....                           | Merlin, Ont.        |
| Deanna Lee Gas Syndicate.....            | Finch, Ont.         |
| DeMers, V.....                           | Petrolia, Ont.      |
| Dickout, Bros.....                       | Lowbanks, Ont.      |
| Donald, D. Estate.....                   | Croton, Ont.        |
| Donald, F. & O.....                      | Oil Springs, Ont.   |
| Donald, R.....                           | Petrolia, Ont.      |
| Donolga Co.....                          | Simcoe, Ont.        |
| Edwards, F. H.....                       | Petrolia, Ont.      |
| Elgin Petroleum Corporation Ltd.....     | Rodney, Ont.        |
| El Paso Gas Products Co.....             | Dunnville, Ont.     |
| Emerson, H. L.....                       | Dunnville, Ont.     |
| Essex Gas & Oil Ltd.....                 | Toronto, Ont.       |
| Fairbank, J. H. Estate.....              | Petrolia, Ont.      |
| Felmont Oil Corporation.....             | Owensboro, Ky.      |
| Fedrich & Moser.....                     | Tillsonburg, Ont.   |
| Fisherville Gas Syndicate.....           | Fisherville, Ont.   |
| Flasher Oil & Gas Syndicate.....         | St. Thomas, Ont.    |
| Fletcher, Mrs. E.....                    | Glanford Sta., Ont. |
| Flood-Oils Ltd.....                      | Sarnia, Ont.        |
| Foreign Exploration Corp. Ltd.....       | Toronto, Ont.       |
| Fox, E. S.....                           | Thorold, Ont.       |
| G. A. E. Developments.....               | St. Thomas, Ont.    |



TABLE IV — LICENSED PRODUCERS, 1963 — *Continued.*

| NAME                                 | ADDRESS             |
|--------------------------------------|---------------------|
| George, A.....                       | Fort Erie, Ont.     |
| Godby, W. M.....                     | Langton, Ont.       |
| Glenerd Ltd.....                     | Dunnville, Ont.     |
| Grand River Gas Ltd.....             | Canfield, Ont.      |
| Greenacres Gas Syndicate.....        | Fort Erie, Ont.     |
| Gurnell, N.....                      | Stevensville, Ont.  |
| Haldimand Gas and Oil Ltd.....       | Cayuga, Ont.        |
| Haldimand Natural Gas Syndicate..... | Stevensville, Ont.  |
| Heise and Marton Gas Syndicate.....  | Welland, Ont.       |
| Hercules Oil & Gas Syndicate.....    | Ridgeway, Ont.      |
| Highbank Oil Ltd.....                | Chatham, Ont.       |
| Holmes, E. B.....                    | Bothwell, Ont.      |
| House, C. C. Estate.....             | Niagara Falls, Ont. |
| Huron Petroleum Co.....              | Chatham, Ont.       |
| Imperial Oil Ltd.....                | London, Ont.        |
| J. V. J. Syndicate.....              | Snyder 26, N.Y.     |
| Jackson, P. L.....                   | Dunnville, Ont.     |
| Jarvis Hereford Farms.....           | Jarvis, Ont.        |
| Karr, E.....                         | Bothwell, Ont.      |
| Kells, E. E.....                     | Petrolia, Ont.      |
| Keradec Petroleums Ltd.....          | Toronto, Ont.       |
| Kerr, J. & J. Co. Ltd.....           | Petrolia, Ont.      |
| Kingsville Gas Co. Ltd.....          | Toronto, Ont.       |
| Kinsey, O. W.....                    | Dunnville, Ont.     |
| Koyden, E. A.....                    | Sarnia, Ont.        |
| Lapp, W.....                         | Niagara Falls, Ont. |
| Layton Gas & Oil Co.....             | Olean, N.Y.         |
| LeJeune, L.....                      | Ridgeway, Ont.      |
| Lewis, C. B.....                     | Lum, Mich.          |
| Lewis, W. G.....                     | Oil Springs, Ont.   |
| Lincoln Natural Gas Ltd.....         | Dunnville, Ont.     |
| Linda Lee Syndicate.....             | Ridgeway, Ont.      |
| Long Point Gas & Oil Co. Ltd.....    | Simcoe, Ont.        |
| Lowbanks Gas Co. Ltd.....            | Dunnville, Ont.     |
| M.M.T. Syndicate.....                | Snyder 26, N.Y.     |
| MacAnn Wall Syndicate.....           | Buffalo, N.Y.       |
| McGaffey, E.....                     | Bothwell, Ont.      |
| McIntyre & Hawkins.....              | Fort Erie, Ont.     |
| McMaster, R. & Sons Co. Ltd.....     | Caledonia, Ont.     |
| McPherson, R. L.....                 | Riverside, Ont.     |
| Maguire, J. T.....                   | Clifford, Ont.      |
| Marcus, L.....                       | Wallacetown, Ont.   |
| Meyers, P.....                       | Fort Erie, Ont.     |
| Mile 18 Mines Ltd.....               | Toronto, Ont.       |
| Mitchell, C.....                     | Oil Springs, Ont.   |
| Mitchell, G.....                     | Oil Springs, Ont.   |

TABLE IV — LICENSED PRODUCERS, 1963 — *Continued.*

| NAME   | ADDRESS               |
|--|-----------------------|
| Monarch Gas and Oil Syndicate.....               | Fisherville, Ont.     |
| Monte Gas Syndicate.....                         | Fort Erie, Ont.       |
| Morningstar, G.....                              | Oil Springs, Ont.     |
| Morningstar, L.....                              | Oil Springs, Ont.     |
| Morrison, D.....                                 | Langton, Ont.         |
| Murdoch, W.....                                  | Dunnville, Ont.       |
| Mulgrave Gas Syndicate.....                      | Ridgeway, Ont.        |
| Nagel, E.....                                    | Stevensville, Ont.    |
| Nauman, J. R.....                                | Fisherville, Ont.     |
| Neff, R. L.....                                  | Sherkston, Ont.       |
| Nemec, J.....                                    | Chatham, Ont.         |
| Newport Gas Syndicate.....                       | Fort Erie, Ont.       |
| Niagara Gas Syndicate.....                       | Fisherville, Ont.     |
| Niece Bros.....                                  | Lowbanks, Ont.        |
| Niece, E.....                                    | Dunnville, Ont.       |
| Nigh, C.....                                     | Stevensville, Ont.    |
| N.Y.K. Oil (Canada) Ltd.....                     | Oil Springs, Ont.     |
| Norgas Development Co.....                       | Simcoe, Ont.          |
| Noyes, L. A. Estate.....                         | Stevensville, Ont.    |
| Nycan Gas Co.....                                | N. Tonawanda, N.Y.    |
| Oko Oil & Gas Co.....                            | Dallas, Texas         |
| Ontario Natural Gas Storage & Pipelines Ltd..... | Chatham, Ont.         |
| Ort, C. H.....                                   | Chippawa, Ont.        |
| Palco & Marr.....                                | Wainfleet, Ont.       |
| Paris Petroleum Ltd.....                         | Princeton, Ont.       |
| Patrick Petroleum Co.....                        | Jackson, Mich.        |
| Peacock Point Gas and Oil Syndicate.....         | Fisherville, Ont.     |
| Pegg Enterprises Ltd.....                        | Morpeth, Ont.         |
| Petrol Oil and Gas Co. Ltd.....                  | Calgary, Alta.        |
| Place Gas and Oil Co. Ltd.....                   | Toronto, Ont.         |
| Pope, W.....                                     | Bothwell, Ont.        |
| Provincial Gas Co. Ltd.....                      | Fort Erie, Ont.       |
| Putman, S. J.....                                | Kingsville, Ont.      |
| Rae, R.....                                      | Niagara Falls, Ont.   |
| Raydis Oil and Gas Co. Ltd.....                  | Chatham, Ont.         |
| Redisterf Gas Syndicate.....                     | Stevensville, Ont.    |
| Reid, E.....                                     | Petrolia, Ont.        |
| Richmount Developments Ltd.....                  | Ridgeway, Ont.        |
| Riddell-Hanna Explorations Ltd.....              | Highland Pk. 3, Mich. |
| Riverside Syndicate.....                         | Welland, Ont.         |
| Roberts, C. H.....                               | Coudersport, Pa.      |
| Robinson Road Gas Syndicate.....                 | Dunnville, Ont.       |
| Roth and Roth Ltd.....                           | Petrolia, Ont.        |
| Roth, F. W. Estate.....                          | Ridgeway, Ont.        |
| Royal Gas Syndicate.....                         | Stevensville, Ont.    |
| Ruch, K.....                                     | Stevensville, Ont.    |

TABLE IV — LICENSED PRODUCERS, 1963 — *Continued.*

| NAME                                      | ADDRESS             |
|---|---------------------|
| R. V. R. Gas Syndicate.....               | Ridgeway, Ont.      |
| Ruegg Gas Co.....                         | Ridgeway, Ont.      |
| Sagadahoc Oil & Gas Corp.....             | San Francisco, Cal. |
| Salina Gas and Oil Co.....                | Chatham, Ont.       |
| Shain, V.....                             | Petrolia, Ont.      |
| Shamblaw, W. M.....                       | Kerrwood, Ont.      |
| Sherk, B. Estate.....                     | Stevensville, Ont.  |
| Sherkston Gas Syndicate.....              | Sherkston, Ont.     |
| Sider, A. and J.....                      | Stevensville, Ont.  |
| Sider, N.....                             | Fort Erie, Ont.     |
| Simon, B.....                             | Chippawa, Ont.      |
| Sodom, L. and A. Syndicate.....           | Ridgeway, Ont.      |
| Standard Gas and Oil Syndicate.....       | Fisherville, Ont.   |
| Starlite Gas Co. Ltd.....                 | Erie County, N.Y.   |
| Steele, C. A. Estate.....                 | Port Colborne, Ont. |
| Stevensville Natural Gas and Fuel Co..... | Stevensville, Ont.  |
| Stewart, E.....                           | Jarvis, Ont.        |
| Sumac Oil & Gas Co.....                   | Wichita, Kansas     |
| Sunnyside Gas Syndicate.....              | Welland Jct., Ont.  |
| T. H. & G. Syndicate.....                 | Ridgeway, Ont.      |
| Thompson, A. L.....                       | Petrolia, Ont.      |
| Tobacco Road Oil Co.....                  | Wellsville, N. Y.   |
| Tri-County Gas and Oil Co. Ltd.....       | Woodstock, Ont.     |
| Triform Exploration (B.C.) Ltd.....       | Toronto, Ont.       |
| Trio Gas Company.....                     | Dunnville, Ont.     |
| Twin City Gas Syndicate.....              | Fort Erie, Ont.     |
| Union Gas Co. of Canada, Ltd.....         | Chatham, Ont.       |
| Valencourt Estate.....                    | Welland, Ont.       |
| Valencourt, L.....                        | Welland, Ont.       |
| Vanderburg, L.....                        | Simcoe, Ont.        |
| Wale, H.....                              | Stevensville, Ont.  |
| Warwick, J. L.....                        | Bothwell, Ont.      |
| Welland County Gas Syndicate.....         | Stevensville, Ont.  |
| Welland Gas Syndicate.....                | Dunnville, Ont.     |
| Welland Iron and Metal Co.....            | Welland, Ont.       |
| Wellandport Natural Gas Co. Ltd.....      | Dunnville, Ont.     |
| Whorton and Associates.....               | Wellsville, N. Y.   |
| Willow Gas and Oil Co.....                | Simcoe, Ont.        |
| Woodstock Oil and Gas Co.....             | Wichita, Kansas     |
| Yochim, E.....                            | Stevensville, Ont.  |
| York Producing Co. Ltd.....               | Wallaceburg, Ont.   |
| Yuez Gas Co.....                          | Buffalo, N.Y.       |
| Zenmac Metal Mines Ltd.....               | Toronto, Ont.       |

TABLE V—ONTARIO OIL FIELDS, WELLS AND PRODUCTION, 1963  
QUANTITIES IN BARRELS

| County          | Field or Pool        | Townships         | Producing<br>Horizon | Wells<br>New Active | Production |
|-----------------|----------------------|-------------------|----------------------|---------------------|------------|
| BRANT,<br>BRUCE | Gables.....          | Burford, Blenheim | Cambrian             | 6 29                | 159,995    |
|                 | Beaumont.....        | Beaumont          | Cambrian             | — 1                 | 239        |
|                 | Vandryke.....        | Burford           | Cambrian             | 1 1                 | 499        |
| BRANT           | Oliver.....          | Albion            | Salina               | — 2                 | 195        |
|                 | Redway.....          | Albion            | Columbian            | 4 256               | 284,772    |
|                 | Walden.....          | Denison           | Columbian            | — 16                | 1,795      |
| BRANT           | Colchester.....      | Colchester S.     | Triassic             | — 7                 | 42,765     |
|                 | Kingsville.....      | Georgetown S.     | Triassic             | — 1                 | 76         |
|                 | Malton.....          | Malton            | Triassic             | — 6                 | 39,195     |
| BRANT           | Regina.....          | Therby West       | Geolph               | — —                 | 69         |
|                 | Richmond.....        | —                 | Dundas               | — —                 | —          |
|                 | Thamesville.....     | Cambrian, Zone    | Columbian            | — 46                | 1,799      |
| BRANT           | Chatham.....         | Chatham           | Geolph               | — 2                 | 428        |
|                 | Chatham.....         | Chatham           | Cambrian             | 10 17               | 284,775    |
|                 | Dover.....           | Dover             | Triassic             | — 1                 | 39         |
| BRANT           | Dundas.....          | Cambrian          | —                    | —                   | —          |
|                 | Chatham.....         | Chatham           | Geolph               | — 5                 | 1,464      |
| BRANT           | Baker.....           | Sumner            | Salina               | 2 23                | 66,765     |
|                 | Colborne.....        | —                 | Salina               | — —                 | —          |
|                 | Kimbrell.....        | Moore             | Geolph               | — 4                 | 8,192      |
| BRANT           | Corvina.....         | Moore             | Salina               | — —                 | —          |
|                 | —                    | —                 | Geolph               | 1 13                | 54,239     |
|                 | Dune.....            | Essex             | Dundas               | — 1                 | 39         |
| BRANT           | Dart.....            | Dart              | Geolph               | 4 8                 | 28,779     |
|                 | McClintock.....      | Essex             | —                    | 1                   | 76         |
|                 | Oil Springs.....     | Essex             | Dundas               | — —                 | —          |
| BRANT           | Patricia.....        | Essex             | Detroit R.           | — 491               | 66,769     |
|                 | —                    | —                 | Detroit R.           | 1 122               | 28,777     |
|                 | Richards.....        | Moore             | Geolph               | — 7                 | 31,239     |
| BRANT           | Richards North.....  | Moore             | Geolph               | — 3                 | 39,772     |
|                 | Richards (Dev.)..... | Essex             | Dundas               | — 38                | 1,392      |
|                 | Richards (H.).....   | Essex             | Geolph               | — 1                 | 39         |
| BRANT           | Seaton.....          | Seaton            | Geolph               | — 1                 | 76         |
|                 | Talford.....         | Moore             | Geolph               | — 1                 | 1,399      |
|                 | Wentworth.....       | Essex             | —                    | —                   | —          |
| BRANT           | —                    | Essex             | Geolph               | — 3                 | 34,662     |
|                 | Warwick.....         | Warwick           | Geolph               | — 3                 | 31,347     |
|                 | —                    | —                 | —                    | —                   | —          |
| BRANT           | Gloucester.....      | Gloucester        | Dundas               | — —                 | —          |
|                 | —                    | —                 | Columbian            | — 129               | 36,196     |
|                 | Grand Bend.....      | McClintock        | Geolph               | — 2                 | 22,943     |
| BRANT           | Eastwood.....        | Essex             | Dundas               | — —                 | —          |
|                 | —                    | —                 | Detroit R.           | — 3                 | 363        |
|                 | —                    | —                 | —                    | —                   | —          |
| Totals.....     |                      |                   |                      | 29 1,311            | 1,466,776  |

TABLE VI — OIL PRODUCTION IN ONTARIO 1959 TO 1963  
(In Barrels)

| County                   | Field                | 1959      | 1960      | 1961      | 1962      | 1963      |
|--------------------------|----------------------|-----------|-----------|-----------|-----------|-----------|
| <b>BRANT,<br/>OXFORD</b> | Gobles.....          | —         | 2,757     | 64,897    | 143,321   | 150,866   |
| <b>ELGIN</b>             | Rodney.....          | 286,116   | 248,364   | 348,810   | 252,785   | 234,318   |
|                          | Wallacetown.....     | 1,915     | 1,926     | 1,745     | 1,547     | 1,458     |
| <b>ESSEX</b>             | Colchester.....      | 51,899    | 185,541   | 105,655   | 66,324    | 42,983    |
|                          | Malden.....          | —         | —         | 2,774     | 25,305    | 20,156    |
| <b>KENT</b>              | Bothwell-Thamesville | 10,561    | 9,262     | 9,933     | 9,583     | 8,939     |
|                          | Chatham.....         | 5,938     | 6,729     | 6,038     | 5,338     | 4,248     |
|                          | Clearville.....      | —         | —         | —         | 99,124    | 234,596   |
|                          | Dover.....           | 1,193     | 1,199     | 854       | 50        | 50        |
|                          | Dresden.....         | 2,786     | 4,005     | 4,103     | 2,267     | 2,414     |
| <b>LAMBTON</b>           | Becher.....          | 50,974    | 62,286    | 57,237    | 47,764    | 40,786    |
|                          | Colinville.....      | 5,812     | 9,502     | 5,051     | 7,999     | 6,429     |
|                          | Corunna.....         | 208,813   | 132,881   | 104,665   | 91,564    | 91,438    |
|                          | Dawn.....            | 41,509    | 41,917    | 24,578    | 21,324    | 29,181    |
|                          | Kimball.....         | 4,396     | 3,153     | 4,547     | 2,141     | 1,713     |
|                          | Oil Springs.....     | 32,784    | 48,596    | 51,079    | 53,694    | 64,748    |
|                          | Petrolia.....        | 25,740    | 25,153    | 26,605    | 27,238    | 28,837    |
|                          | Seckerton.....       | 62,377    | 32,982    | 48,187    | 46,861    | 51,559    |
|                          | Seckerton N.....     | 8,239     | 29,516    | 58,958    | 45,855    | 39,512    |
|                          | Shetland (Dev.)..... | 802       | 1,656     | 3,254     | 2,497     | 1,852     |
|                          | Telford.....         | 3,321     | 2,504     | 1,610     | 1,180     | 1,109     |
|                          | Wanstead.....        | 82,661    | 38,524    | 42,142    | 38,718    | 34,462    |
|                          | Warwick.....         | 40,835    | 46,904    | 71,937    | 62,743    | 51,547    |
| <b>MIDDLESEX</b>         | Glencoe.....         | 22,351    | 28,595    | 34,978    | 36,762    | 36,108    |
|                          | Grand Bend.....      | 45,257    | 37,112    | 68,484    | 40,058    | 22,945    |
| <b>Other</b>             | Misc.....            | 5,301     | 3,966     | 966       | 2,492     | 3,122     |
| Totals.....              |                      | 1,001,580 | 1,005,030 | 1,149,087 | 1,134,534 | 1,205,376 |

### SECTION 3 — EXPLORATION AND DRILLING

#### SUMMARY:

As in our Annual Report as a whole, this section deals primarily with statistics, accompanied by some explanatory text. The phases of activity covered are field work, leasing and drilling.

Highlights of the year were: the excellent percentage of successful exploratory wells, the increase in Cambrian drilling, and the successful exploratory drilling in eastern Lake Erie.

### Geophysical and Geochemical Exploration

Detailed field work of this type was more concentrated than in previous years, most of it being in the five counties of Kent, Elgin, Lambton, Middlesex and Huron. In addition to the detail work, there was a reconnaissance survey using electrical methods extending from Kent County, through Elgin, Oxford, Norfolk and Brant Counties to Haldimand County, and reconnaissance geochemical surveys in Lambton and Huron Counties.

The companies licensed to do geophysical and geochemical field work are shown in Table A.

Table B shows the methods used, the areas covered and the time in crew-months expended.

In addition to the above, there was some seismic and magnetic activity in the off-shore portion of the Hudson Bay Lowlands, about 2½ crew-months in all, but these waters at present are not considered as being part of Ontario.

TABLE A — LICENCE TO CONDUCT GEOPHYSICAL AND  
GEOCHEMICAL EXPLORATION 1963

| NAME   | ADDRESS         |
|--|-----------------|
| Bluewater Oil & Gas Ltd.....                     | Calgary, Alta.  |
| BP Exploration Canada, Ltd.....                  | London, Ont.    |
| British American Oil Co. Ltd.....                | Toronto, Ont.   |
| California Standard Co. Ltd.....                 | Ottawa, Ont.    |
| Debnam, A. H.....                                | Toronto, Ont.   |
| Electronic Geophysical Surveys Ltd.....          | Vancouver, B.C. |
| El Paso Natural Gas Products.....                | El Paso, Texas. |
| Home Oil Company Ltd.....                        | Calgary, Alta.  |
| Imperial Oil Ltd.....                            | Chatham, Ont.   |
| McClusky, J.....                                 | Scarboro, Ont.  |
| Ontario Natural Gas Storage & Pipelines Ltd..... | Chatham, Ont.   |
| Place Gas & Oil Co. Ltd.....                     | Toronto, Ont.   |
| Texaco Explorations Ltd.....                     | Calgary, Alta.  |
| Union Gas Co. of Canada Ltd.....                 | Chatham, Ont.   |
| Western Albertmont Petroleums Ltd.....           | Calgary, Alta.  |

**TABLE B—GEOCHEMICAL AND GEOPHYSICAL ACTIVITY**

| Method      | Counties                          | Crew-months | Acreage covered               |
|-------------|-----------------------------------|-------------|-------------------------------|
| Geochemical | Lambton<br>Middlesex<br>Huron     | 22          | 563,000<br>+ reconnaissance   |
| Gravity     | Lambton<br>Kent                   | 11          | 298,000                       |
| Magnetic    | Huron<br>Lambton<br>Kent<br>Elgin | 7           | 5,000                         |
| Electrical  | Various                           | 3½          | reconnaissance<br>only        |
| Seismic     | Haldimand<br>(Lake Erie)          | ½           | 222,000                       |
| Totals      |                                   | 44          | 1,086,000<br>+ reconnaissance |

### Leasing

The number of Licences to Lease Oil and Gas Rights issued in 1963 — 203, is only slightly less than in 1962, indicating the rate of land acquiral was maintained at a high level. The licencees are listed in Table C, and the acreage acquired by counties is shown in Table D. The grand total of 462,150 acres is only slightly less than 1962, definite proof of the continued interest and confidence in Ontario's potential, particularly in the Cambrian sediments. It is a conservative estimate that more than 50% of the land acreage acquired in 1963 was taken with Cambrian exploration as the objective.

Transactions involving Great Lakes acreage were confined to Lake Erie. Acquirals were considerably less than in 1962, and much acreage was surrendered. The total Great Lakes acreage under lease or exploratory licence at year's end was 1,152,122, nearly all in Lake Erie, a decrease of 356,995 acres as compared to the end of 1962. Maps showing the location of the acreage held can be obtained from the Lands Branch of the Ontario Department of Mines.

Referring to Table D, and acreage acquired by counties, it is of interest to note the changes in the pattern of leasing activity. Peterborough County appears for the first time, and there was important acreage taken in Lincoln County.

Bruce County, where Cambrian sediments are present, received much attention, and at time of writing, drilling has begun. Elgin, Haldimand, Kent, Lambton, Middlesex, Norfolk and Oxford Counties were also the scene of intensive leasing. Essex, Wellington, Brant, Elgin, Kent and Perth Counties show a sharp decline in new acreage leased.

TABLE C — PERSONS LICENSED TO LEASE GAS AND OIL  
RIGHTS, 1963

| NAME                                    | ADDRESS              |
|---|----------------------|
| Alcon Petroleum Ltd.....                | Calgary, Alta.       |
| Algar, M. E.....                        | Calgary, Alta.       |
| Allan, H. R.....                        | Detroit, Mich.       |
| Allegany Producing Corporation.....     | Wellsville, N.Y.     |
| Anchor Petroleum Ltd.....               | Toronto, Ont.        |
| Aristone, G.....                        | St. Thomas, Ont.     |
| Arrowhead Exploration Co. Ltd.....      | Denver 2, Colorado.  |
| Balmer, Howard J.....                   | Chatham, Ont.        |
| Beach, P. J.....                        | St. Catharines, Ont. |
| Bluewater Oil & Gas Ltd.....            | London, Ont.         |
| Bornwitha Mining Co. Ltd.....           | Toronto, Ont.        |
| Bova Gas & Development Co.....          | Buffalo, N.Y.        |
| Boyce, G.....                           | Chatham, Ont.        |
| BP Exploration Canada, Ltd.....         | London, Ont.         |
| Brady, Findlay & Quillian Ltd.....      | Chatham, Ont.        |
| British American Oil Co. Ltd., The..... | Toronto, Ont.        |
| Bryant, D. E.....                       | London, Ont.         |
| Burton, A. R.....                       | Toronto, Ont.        |
| Burton, J. T.....                       | Toronto, Ont.        |
| Bury, V. H.....                         | West Lorne, Ont.     |
| Bushong, S.....                         | Indianapolis, Ind.   |
| Camerina Petroleum Corporation.....     | Houston, Texas.      |
| Cameron, W. L.....                      | Lambeth, Ont.        |
| Canadian Essex Oil & Gas Co.....        | London, Ont.         |
| Canadian Fina Oil Ltd.....              | Calgary, Alta.       |
| Canadian Oil Companies Ltd.....         | Calgary, Alta.       |
| Central Del Rio Oils Ltd.....           | Calgary, Alta.       |
| Central Pipe Line Co. Ltd. The.....     | Chatham, Ont.        |
| Chalton, W. E.....                      | Tillsonburg, Ont.    |
| Chaney, T. B.....                       | Rodney, Ont.         |
| Chittim, G.....                         | Milton, Ont.         |
| Coatsworth, T. E.....                   | Chatham, Ont.        |
| Collings, G. H.....                     | Peterborough, Ont.   |
| Consolidated West Petroleum Ltd.....    | Toronto, Ont.        |
| Consumers Gas Co., The.....             | Toronto, Ont.        |
| Cook, J. T.....                         | Keenan, Ont.         |
| Coppinger, W. J.....                    | Wichita 2, Kansas    |
| Coste, E. F.....                        | Toronto, Ont.        |



TABLE C—PERSONS LICENSED TO LEASE GAS AND OIL  
RIGHTS, 1963—*Continued*

| NAME                                      | ADDRESS              |
|---|----------------------|
| Cruickshank, J. G.....                    | Toronto, Ont.        |
| Cullen, R. H.....                         | Toronto, Ont.        |
| Culver, G. D.....                         | Dunnville, Ont.      |
| Daust, A.....                             | Campbellford, Ont.   |
| Davis, D. L.....                          | Wichita 14, Kansas   |
| DeMers, V. E.....                         | Petrolia, Ont.       |
| Dome Petroleum Ltd.....                   | Calgary, Alta.       |
| Donnan, B.....                            | Toronto, Ont.        |
| Doubt, J. M.....                          | Millbrook, Ont.      |
| Dufton, F. R.....                         | Chatham, Ont.        |
| Duke, J. W.....                           | Chesley, Ont.        |
| Eckford, A. C.....                        | Courtland, Ont.      |
| Electric Reduction Co. of Canada Ltd..... | Toronto, Ont.        |
| Elvidge, R.....                           | Peterborough, Ont.   |
| Everett, H. E. Jr.....                    | Detroit, 39, Mich.   |
| Feinberg, B.....                          | Evansville, Ind.     |
| Feldmeier, B.....                         | Morrison, Ont.       |
| Feldmeier, L.....                         | Morrison, Ont.       |
| Felmont Oil Corporation.....              | Owensboro, Kentucky. |
| Ferguson, D. A.....                       | Chatham, Ont.        |
| Finney, L.....                            | Wallaceburg, Ont.    |
| Gauld, C. C.....                          | London, Ont.         |
| Girling, W. H.....                        | Toronto, Ont.        |
| Gligor, P.....                            | West Lorne, Ont.     |
| Gough, L.....                             | Toronto, Ont.        |
| Gull Oil & Gas Ltd.....                   | Calgary, Alta.       |
| Haldimand Gas & Oil Ltd.....              | Cayuga, Ont.         |
| Halls, T. E.....                          | Fergus, Ont.         |
| Hewgill, R. A.....                        | Thornbury, Ont.      |
| Home Oil Company Limited.....             | Calgary, Alta.       |
| Hues, K.....                              | Pontypool, Ont.      |
| Hunter, J.....                            | London, Ont.         |
| Huperz, M.....                            | Detroit, Mich.       |
| Hussey, G.....                            | Petrolia, Ont.       |
| Irving, D.....                            | Simcoe, Ont.         |
| Jackson, P. L. Co.....                    | Dunnville, Ont.      |
| Jamieson, A. H.....                       | Tillsonburg, Ont.    |
| Jarvis Hereford Farms.....                | Jarvis, Ont.         |
| Johnson, R. D.....                        | Calgary, Alta.       |
| Jones, G.....                             | Toronto, Ont.        |
| Killens, A.....                           | Toronto, Ont.        |
| Knight, H. W.....                         | Scarboro, Ont.       |
| Kriter, R. E.....                         | Rodney, Ont.         |
| Layton, J. G. Jr.....                     | Olean, N.Y.          |
| Long Point Gas and Oil Ltd.....           | Simcoe, Ont.         |

TABLE C—PERSONS LICENSED TO LEASE GAS AND OIL  
RIGHTS, 1963 — *Continued*

| NAME   | ADDRESS                |
|--|------------------------|
| Lyons, S.....                                    | Simcoe, Ont.           |
| Mahaffy, A. M. & M. F.....                       | Toronto, Ont.          |
| Mallonee, F. W.....                              | Wichita, Kansas        |
| Mann, R. E.....                                  | Simcoe, Ont.           |
| Markel, R. D.....                                | Clark Lake, Mich.      |
| McClusky, J. B.....                              | Scarboro, Ont.         |
| McClusky, J. B. Ltd.....                         | Willowdale, Ont.       |
| McDonald, G. F.....                              | London, Ont.           |
| McKenzie, D. F.....                              | Sarnia, Ont.           |
| McKeough, W. S.....                              | Cedar Springs, Ont.    |
| McKillop, L. G.....                              | Tillsonburg, Ont.      |
| McLachlin, D. A.....                             | Tupperville, Ont.      |
| McLean, A.....                                   | Rodney, Ont.           |
| McMaster, W. R.....                              | Caledonia, Ont.        |
| McMaster, R. & Sons Co. Ltd.....                 | Caledonia, Ont.        |
| McMillan, D. A.....                              | Rodney, Ont.           |
| McMillan, G.....                                 | Blenheim, Ont.         |
| McPherson, R. L.....                             | Riverside, Ont.        |
| Mid Eastern Oil & Gas Ltd.....                   | London, Ont.           |
| Mile 18 Mines Ltd.....                           | Toronto, Ont.          |
| Mohawk Drilling & Exploration Co. Ltd.....       | Burlington, Ont.       |
| Molendyk, W.....                                 | Toronto, Ont.          |
| Nemec, J.....                                    | Chatham, Ont.          |
| Nestoruk, P. D.....                              | Calgary, Alta.         |
| Nixon, G. L.....                                 | London, Ont.           |
| Norgas Development Ltd.....                      | Simcoe, Ont.           |
| Nussbaum, N.....                                 | Port Huron, Mich.      |
| Ontario Natural Gas Storage & Pipelines Ltd..... | Chatham, Ont.          |
| Palmer, G. W.....                                | Highgate, Ont.         |
| Pearson, G. R.....                               | Toronto, Ont.          |
| Penwa Oils Ltd.....                              | Calgary, Alta.         |
| Pearson, W. L.....                               | Toronto, Ont.          |
| Petroward Corporation.....                       | Chicago, Ill.          |
| Place Gas & Oil Co. Ltd.....                     | Toronto, Ont.          |
| Portelance, D.....                               | Port Arthur, Ont.      |
| Prosser, C. A.....                               | Guelph, Ont.           |
| Quibell, R.....                                  | London, Ont.           |
| Railsback, C. M.....                             | Wichita Falls, Texas   |
| Rawlings, G. H.....                              | Chatham, Ont.          |
| Rayment, O. B.....                               | Chatham, Ont.          |
| Reaume, H.....                                   | Chatham, Ont.          |
| Riddell, B.....                                  | Highland Park 3, Mich. |
| Riddell-Hanna Explorations Ltd.....              | Highland Park 3, Mich. |
| Roberts, C. H.....                               | Coudersport, Pa.       |
| Rose, G.....                                     | Chatham, Ont.          |

TABLE C—PERSONS LICENSED TO LEASE GAS AND OIL  
RIGHTS, 1963—*Continued*

| NAME  | ADDRESS                |
|---|------------------------|
| Rosenblat, R. S.....                        | Scarboro, Ont.         |
| Roth, E. A.....                             | Petrolia, Ont.         |
| Roth, E. L.....                             | Petrolia, Ont.         |
| Roth and Roth Ltd.....                      | Petrolia, Ont.         |
| Rowe, E. P.....                             | Brights Grove, Ont.    |
| Rowe, M. K.....                             | Ottawa, Ont.           |
| Rowe, M. M.....                             | Brights Grove, Ont.    |
| Ruetz, H.....                               | Kincardine, Ont.       |
| Sadlier, L.....                             | Chatham, Ont.          |
| Sagadahoc Oil and Gas Corporation.....      | San Francisco, Cal.    |
| Scott, N. W.....                            | Sault Ste. Marie, Ont. |
| Seynuck, T.....                             | Acton, Ont.            |
| Shackleton, G. A.....                       | Chatham, Ont.          |
| Sharpe, D. H.....                           | Aylmer, Ont.           |
| Shaw, I. D.....                             | Toronto, Ont.          |
| Shepherd, R. L.....                         | London, Ont.           |
| Simpson, R. W.....                          | Dresden, Ont.          |
| Smith, G. H.....                            | Fort Erie, Ont.        |
| Smith, L. S.....                            | Wichita 2, Kansas      |
| Smith, S. T.....                            | Wichita, Kansas        |
| St. Denis, A.....                           | Rodney, Ont.           |
| Stanwell Oil & Gas Ltd.....                 | Toronto, Ont.          |
| Stewart, Elgin.....                         | Jarvis, Ont.           |
| Stork, C.....                               | Wardsville, Ont.       |
| Strong, W. H.....                           | Perth, Ont.            |
| Sullivan, K.....                            | Highland Park, Mich.   |
| Sumac Oil & Gas Co.....                     | Wichita, Kansas        |
| Sylvestre, L. A.....                        | Chatham, Ont.          |
| Tack, J. D.....                             | St. Clair, Mich.       |
| Texaco Exploration Company.....             | Calgary, Alta.         |
| Thomas, D. W.....                           | Chatham, Ont.          |
| Thompson, J. W.....                         | Chatham, Ont.          |
| Tirkanits, N.....                           | Montreal, Que.         |
| Tobacco Road Oil Company.....               | Wellsville, N.Y.       |
| Tostik, P.....                              | Simcoe, Ont.           |
| Trans Valley Gas & Oil Corporation Ltd..... | Toronto, Ont.          |
| Triform Explorations Ltd.....               | Toronto, Ont.          |
| Tyrrill, E. W.....                          | Fort Erie, Ont.        |
| Union Gas Co. of Canada Ltd.....            | Chatham, Ont.          |
| Wallis-Auld Oil Syndicate.....              | Watford, Ont.          |
| Walker, C. R.....                           | Riverside, Ont.        |
| Walsh, J. F.....                            | Buffalo, N.Y.          |
| Warner, C. W.....                           | Smith Falls, Ont.      |
| Western Decalta Petroleum Ltd.....          | Calgary, Alta.         |
| Western Gypsum Products Ltd.....            | Winnipeg, Man.         |

TABLE C—PERSONS LICENSED TO LEASE GAS AND OIL  
RIGHTS, 1963 — *Continued*

| NAME                                     | ADDRESS              |
|--|----------------------|
| Westwell Oil & Gas Ltd.....              | Calgary, Alta.       |
| West Point Syndicate.....                | Willowdale, Ont.     |
| Westwood, W.....                         | Dresden, Ont.        |
| Whaling, H. M.....                       | London, Ont.         |
| Whiteoaks Gas & Oil Ltd.....             | Clarkson, Ont.       |
| Whittall, F. L.....                      | Windsor, Ont.        |
| Whitty, J.....                           | Toronto, Ont.        |
| Whorton & Associates.....                | Wellsville, N.Y.     |
| Willing, K.....                          | Chatham, Ont.        |
| Willits, D. E.....                       | Toronto, Ont.        |
| Willsie, G.....                          | Theford, Ont.        |
| Wilton, H. R.....                        | Chatham, Ont.        |
| Wood, J. W.....                          | Downsview, Ont.      |
| Woodstock Oil & Gas Co. The.....         | Wichita, Kansas      |
| Yuez Gas Co.....                         | Buffalo, N.Y.        |
| Zenith International Petroleum Corp..... | Oklahoma City, Okla. |
| Zenmac Metal Mines Ltd.....              | Toronto, Ont.        |

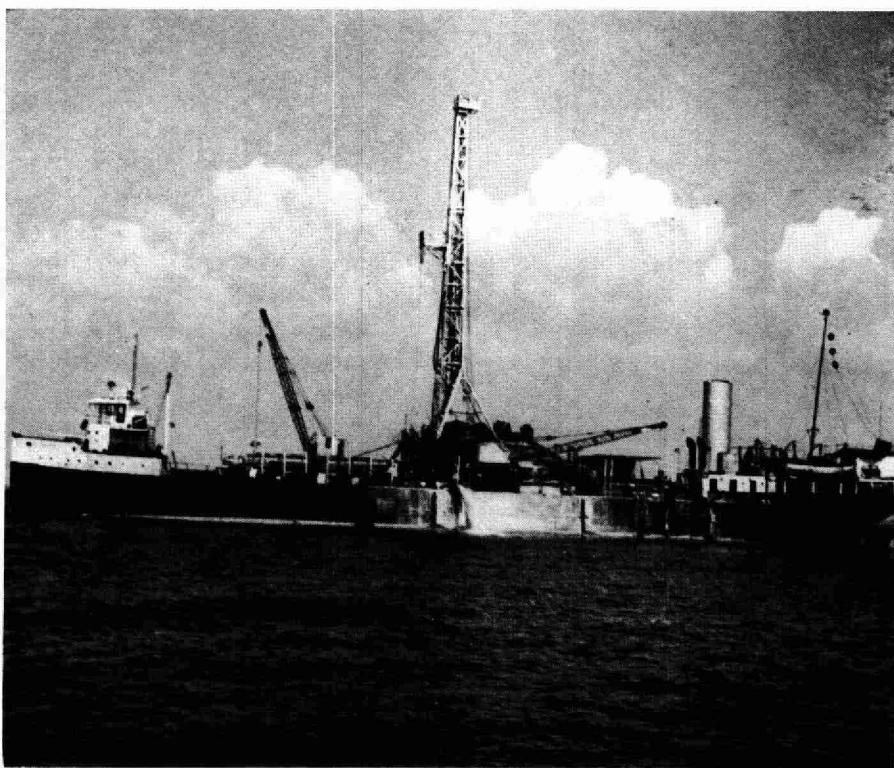
TABLE D — ACREAGE ACQUIRED ON LAND, 1963

| County                | Acreage | County       | Acreage |
|-----------------------|---------|--------------|---------|
| Brant                 | 10,555  | Middlesex    | 62,660  |
| Bruce                 | 45,880  | Norfolk      | 20,370  |
| Elgin                 | 66,515  | Oxford       | 18,355  |
| Essex                 | 840     | Perth        | 50      |
| Grey                  | 5,400   | Peterborough | 7,465   |
| Haldimand             | 34,450  | Simcoe       | 2,050   |
| Huron                 | 3,785   | Waterloo     | 8,400   |
| Kent                  | 29,420  | Welland      | 8,185   |
| Lambton               | 99,675  | Wellington   | 300     |
| Lincoln               | 27,100  | Wentworth    | 10,695  |
| Grand Total — 462,150 |         |              |         |

## Drilling

### General

The usual Tables, E to L inclusive, present the pertinent statistics of 1963 drilling. Table E, the drilling summary by location, class and results, reveals that the total number of completions declined from previous years, yet the total footage was substantially higher than in 1962, as a result of the increased number of Cambrian tests. Table F shows Lake Erie completions, an important part of the over-all activity. The total was less than in 1962, but resulted in some significant discoveries.



**Lake Erie Drilling Rig**

Tables G and H, summaries by depth and result, show clearly the continuing trend to deeper drilling. Ordovician and Cambrian wells accounted for 26.7% of the total, compared to 31.2% in 1962 and 18.4% in 1961. The over-all success ratios were most gratifying — 20.4% for exploratory tests and 64.2% for development wells. Note that in making the above calculations, service and other wells not intended to be productive are excluded.

All licensed drilling contractors are listed in Table I. Table J lists all well-permit holders: these are the people who provide the funds and initiative to do the exploratory and development drilling to keep the oil and gas industry alive and flourishing, and the Department wishes them to know that their efforts are appreciated.

### **Exploratory Drilling**

The results of exploratory drilling were the best on record — 19 successful completions out of 93, for a success ratio of 20.4%. And exploratory drilling constituted a high proportion of total exploratory and development completions — 46%, as compared to 35.9% in 1962, 34% in 1961 and 36.8% in 1960.

The total exploratory footage, 217,600 is the highest since 1955, and an average of 2340 feet per well.

The successful exploratory tests are listed in Table K, and located on the map opposite page 33. Eleven of the 15 successful tests which found gas were in Lake Erie, and can be considered as adding substantially to the indicated gas reserves in the Clinton-Cataract of the eastern half of the Lake. Another discovery was of a Guelph reef in Sombra township, Lambton County, the type and size of which is as yet unknown. The other three successful tests found Clinton-Cataract gas in Norfolk County.

The four tests which found oil can not yet be assessed for potential or significance. Two were Cambrian, one north of the Clearville field near Duart, the other near Verschoyle in Oxford County. The other two were Silurian, both in Lambton County: Salina oil near Brigden and Guelph oil near Sutorville. The latter well produced at a phenomenal rate immediately after stimulation, and has continued to flow to the time of writing. Some of the more important dry exploratory tests are listed in Table L.

### **Development Drilling**

The geographical distribution of the 109 development wells completed in 1963 is shown in Table E. Their classification by target depth is given in Table G and the success ratios are in Table H. The over-all success ratio was down to 64% in 1963 as compared to 74% in 1962, due primarily to poor results from Salina-Guelph development drilling. The total development footage, excluding "other" wells, was 175,153 for an average of 1607 feet per well.

All the Devonian and Salina-Guelph wells were in the four counties of Kent, Lambton, Middlesex and Elgin. The only ones of any significance were five Guelph oil wells near the Dawn-Sombra boundary in Lambton County, which used sand-fracturing techniques with good success.

The Clinton-Cataract completions were nearly all in the Haldimand-Norfolk area, including Lake Erie, and those successful all found gas, 20 of the 41 being offshore and adding significantly to the reserves there.

The 16 successful Cambrian wells all found oil, 6 in Gobles and 10 at Clearville, and helped to push 1963 production figures to a new record high. Both fields now appear to be nearly delineated and Cambrian oil production is expected to level off until further discoveries are made.

One of the Clearville wells deserves special mention, in that it found oil in the Trenton, but production soon declined, and the well was deepened to the Cambrian.

## Index of Gas and Oil Fields

- |                       |                             |                         |                                |                         |                       |                |
|-----------------------|-----------------------------|-------------------------|--------------------------------|-------------------------|-----------------------|----------------|
| <b>Essex County</b>   |                             |                         |                                |                         |                       |                |
| 1.                    | Malden (Gas & Oil)          | 38.                     | Bickford (Gas)                 | 75.                     | Rodney (Oil)          |                |
| 2.                    | Colchester (Oil)            | 39.                     | Duthill (Gas)                  | 76.                     | New Glasgow (Gas)     |                |
| 3.                    | Kingsville (Oil)            | 40.                     | Dawn (Gas & Oil)               | 77.                     | Crinan (Gas & Oil)    |                |
| 4.                    | Kingsville—Leamington (Gas) | 41.                     | Oakdale (Oil)                  | 78.                     | Townline (Gas)        |                |
| 5.                    | Pelee Island (Oil)          | 42.                     | Dawn 167 (Gas)                 | 79.                     | Cowal (Gas)           |                |
| 6.                    | Mersea (Gas & Oil)          | 43.                     | Dawn 156 (Gas & Oil)           | 80.                     | Dutton (Oil)          |                |
| 7.                    | Staples (Gas & Oil)         | 44.                     | Waubuno (Gas)                  | 81.                     | Wallacetown (Oil)     |                |
| 8.                    | Comber (Gas & Oil)          | 45.                     | Kimball-Colinville (Gas & Oil) |                         | (Old Dutton Field)    |                |
| 9.                    | Belle River (Oil)           | 46.                     | Mooretown (Oil)                | 82.                     | Malahide (Gas)        |                |
| <b>Kent County</b>    |                             |                         | 47.                            | Payne (Gas)             | 83.                   | Richmond (Gas) |
| 10.                   | Lake St. Clair (Gas)        | 48.                     | Seckerton (Gas & Oil)          | 84.                     | Vienna (Gas)          |                |
| 11.                   | Electric (Gas)              | 49.                     | Corunna (Gas & Oil)            | 85.                     | Griffin Corners (Gas) |                |
| 12.                   | Dover (Gas & Oil)           | 50.                     | Talford (Oil)                  | 86.                     | Eden (Gas)            |                |
| 13.                   | Fletcher (Oil)              | 51.                     | Sarnia (Gas)                   | <b>Norfolk County</b>   |                       |                |
| 14.                   | Tilbury (Gas)               | 52.                     | Plympton-Sarnia (Gas & Oil)    | 87.                     | Cultus (Gas)          |                |
| 15.                   | Glenwood (Oil)              | 53.                     | Mandaumin (Gas)                | 88.                     | Long Point (Gas)      |                |
| 16.                   | Romney (Oil)                | 54.                     | Petrolia (Oil)                 | 89.                     | Norfolk (Gas)         |                |
| 17.                   | Wheatley (Gas & Oil)        | 55.                     | Wanstead (Oil)                 | <b>Oxford County</b>    |                       |                |
| 18.                   | Stevenson (Oil)             | 56.                     | Wilson Croft (Oil)             | 90.                     | South Norwich (Gas)   |                |
| 19.                   | D'Clute (Gas)               | 57.                     | Oil Springs (Oil)              | 91.                     | Brownsville (Gas)     |                |
| 20.                   | Doyle (Gas)                 | 58.                     | Shetland (Gas & Oil)           | 92.                     | Innerkip (Gas & Oil)  |                |
| 21.                   | Kipp (Oil)                  | 59.                     | Dante (Oil)                    | 93.                     | Gobles (Gas & Oil)    |                |
| 22.                   | Richardson's Siding (Oil)   | 60.                     | McCready (Oil)                 | <b>Brant County</b>     |                       |                |
| 23.                   | Wolfe (Gas)                 | 61.                     | Innwood (Oil)                  | 94.                     | Haldimand (Gas & Oil) |                |
| 24.                   | Guilds (Gas)                | 62.                     | Watford-Kerrwood (Oil)         | <b>Haldimand County</b> |                       |                |
| 25.                   | Morpeth (Gas)               | 63.                     | Warwick (Oil)                  | 95.                     | Haldimand (Gas)       |                |
| 26.                   | Botany (Gas)                | <b>Huron County</b>     |                                | <b>Welland County</b>   |                       |                |
| 27.                   | Clearville (Oil)            | 64.                     | Bayfield (Gas)                 | 96.                     | Welland (Gas)         |                |
| 28.                   | Bothwell-Thamesville (Oil)  | 65.                     | Zurich (Gas)                   | <b>Wentworth County</b> |                       |                |
| 29.                   | Zone (Gas)                  | 66.                     | Dashwood (Gas)                 | 97.                     | Rockton (Gas)         |                |
| 30.                   | Wabash (Gas & Oil)          | <b>Middlesex County</b> |                                | <b>Halton County</b>    |                       |                |
| 31.                   | Camden Gore (Gas)           | 67.                     | Grand Bend (Oil)               | 98.                     | Hornby (Gas)          |                |
| 32.                   | Dresden (Gas & Oil)         | 68.                     | Keyser (Gas)                   | 99.                     | Acton (Gas & Oil)     |                |
| 33.                   | Chatham (Gas & Oil)         | 69.                     | Adelaide (Oil)                 | <b>Bruce County</b>     |                       |                |
| 34.                   | Chatham Gore (Gas)          | 70.                     | Crumlin (Gas)                  | 100.                    | Hepworth (Gas)        |                |
| <b>Lambton County</b> |                             |                         | 71.                            | Glencoe (Oil)           |                       |                |
| 35.                   | East Becher (Gas)           | 72.                     | Newberry (Gas)                 |                         |                       |                |
| 36.                   | West Becher (Gas & Oil)     | 73.                     | Wardsville (Gas)               |                         |                       |                |
| 37.                   | Sombra (Gas)                | <b>Elgin County</b>     |                                |                         |                       |                |
|                       |                             | 74.                     | Woodgreen (Gas)                |                         |                       |                |



TABLE F—LAKE ERIE DRILLING, 1963

| County        | Haldimand |    | Norfolk |    | Essex |   | Totals |    |
|---------------|-----------|----|---------|----|-------|---|--------|----|
|               | E         | D  | E       | D  | E     | D | E      | D  |
| Result<br>Gas | 5         | 6  | 6       | 6  | —     | — | 11     | 12 |
| Dry           | 1         | 4  | 2       | 4  | 1     | — | 9      | 8  |
| Sub-total     | 6         | 10 | 8       | 10 | 1     | — | 13     | 20 |
| Totals        | 16        |    | 18      |    | 1     |   | 32     |    |

TABLE G—DRILLING SUMMARY BY DEPTH, 1963

| Depth         | Devonian |    | Silurian |    | Ordovician |   | Cambrian |    | Totals |     |
|---------------|----------|----|----------|----|------------|---|----------|----|--------|-----|
|               | E        | D  | E        | D  | E          | D | E        | D  | E      | D   |
| Result<br>Gas | —        | —  | 15       | 42 | —          | — | —        | —  | 15     | 42  |
| Oil           | —        | 5  | 2        | 7  | —          | — | 2        | 16 | 4      | 28  |
| Dry           | 2        | 3  | 44       | 28 | 2          | 5 | 26       | 1  | 74     | 38  |
| Other         | 2        | 9  | —        | 3  | —          | — | —        | —  | 2      | 12  |
| Sub-Total     | 4        | 17 | 61       | 80 | 2          | 5 | 28       | 19 | 95     | 123 |
| Totals        | 21       |    | 141      |    | 7          |   | 47       |    | 216    |     |

FOOTNOTE—The letters E and D mean exploratory and development.

The category "other" includes all wells not intended for production—for injection, disposal, gas-storage, core—and structure-tests, etc.

TABLE H—SUCCESS RATIOS, 1963

| EXPLORATORY                    |     |     |     | Total | % Success |
|--------------------------------|-----|-----|-----|-------|-----------|
|                                | Gas | Oil | Dry |       |           |
| Devonian.....                  | —   | —   | 2   | 2     | 0.0       |
| { Salina-Guelph.....           | 1   | 2   | 38  | 41    | 7.3       |
| Silurian { Clinton-Catawba.... | 14  | —   | 6   | 20    | 70.0      |
| Ordovician.....                | —   | —   | 2   | 2     | 0.0       |
| Cambrian.....                  | —   | 2   | 26  | 28    | 7.1       |
| TOTALS.....                    | 15  | 4   | 74  | 93    | 20.4      |



TABLE H — SUCCESS RATIOS, 1963 — *Continued*

|                        | DEVELOPMENT |     |     |       | % Success |
|------------------------|-------------|-----|-----|-------|-----------|
|                        | Gas         | Oil | Dry | Total |           |
| Devonian.....          | —           | 5   | 3   | 8     | 62.5      |
| { Salina-Guelph.....   | 1           | 7   | 14  | 22    | 36.4      |
| { Clinton-Cataract.... | 41          | —   | 14  | 55    | 74.5      |
| Ordovician.....        | —           | —   | 5   | 5     | 0.0       |
| Cambrian.....          | —           | 16  | 3   | 19    | 84.2      |
| TOTALS.....            | 42          | 28  | 39  | 109   | 64.2      |

TABLE I — OWNERS OF LICENSED DRILLING MACHINES, 1963

| NAME                                  | ADDRESS                | No. OF RIGS |
|---------------------------------------|------------------------|-------------|
| Anchor Petroleum Ltd.....             | Toronto, Ont.....      | 1           |
| Brandon, H.....                       | Oil Springs, Ont.....  | 1           |
| Central Pipe Line Co. Ltd.....        | Chatham, Ont.....      | 1           |
| Chevalier and Tremblay.....           | Chatham, Ont.....      | 3           |
| Culver Drilling Co. Ltd.....          | Dunnville, Ont.....    | 4           |
| DeMers, V.....                        | Petrolia, Ont.....     | 1           |
| Demaray and Nichols.....              | Kerrwood, Ont.....     | 4           |
| Dennis, G. A. and Sons.....           | Selkirk, Ont.....      | 1           |
| Earl, S.....                          | Kerrwood, Ont.....     | 3           |
| Emerson, H. L.....                    | Dunnville, Ont.....    | 1           |
| English, Emery.....                   | Port Lambton, Ont..... | 1           |
| English, E. Drilling Co.....          | Sarnia, Ont.....       | 1           |
| Evans, G.....                         | Glencoe, Ont.....      | 2           |
| Haldimand Gas & Oil Wells Ltd.....    | Cayuga, Ont.....       | 1           |
| Hernandez, E.....                     | Harrow, Ont.....       | 1           |
| Irving, D.....                        | Simcoe, Ont.....       | 4           |
| Jackson, P. L. Co.....                | Dunnville, Ont.....    | 2           |
| James Drilling Ltd.....               | Sombra, Ont.....       | 2           |
| Jarvis Hereford Farms.....            | Jarvis, Ont.....       | 1           |
| Kingsville Gas Co. Ltd.....           | Toronto, Ont.....      | 1           |
| Kiser, W. R.....                      | Chatham, Ont.....      | 2           |
| Lyons, S. and Son.....                | Simcoe, Ont.....       | 2           |
| Mandley Drilling Contractors Ltd..... | Dunnville, Ont.....    | 6           |
| Marsh, W.....                         | Bothwell, Ont.....     | 1           |
| McGaffey, E. R.....                   | Bothwell, Ont.....     | 1           |
| McKillop, W. and Sons.....            | Tillsonburg, Ont.....  | 1           |
| McMaster R. and Sons Co. Ltd.....     | Caledonia, Ont.....    | 2           |
| McPherson, R. L. Drilling Ltd.....    | Riverside, Ont.....    | 1           |
| Meier, H. W.....                      | Paincourt, Ont.....    | 5           |
| Montgomery Bros.....                  | Selkirk, Ont.....      | 1           |
| Nauman, J. R.....                     | Fisherville, Ont.....  | 1           |
| Nemec, J.....                         | Chatham, Ont.....      | 1           |

TABLE 1 — OWNERS OF LICENSED DRILLING MACHINES, 1963

*Continued.*

| NAME  | ADDRESS               | No. OF RIGS |
|---|-----------------------|-------------|
| Newport, W.....                             | Wardsville, Ont.....  | 1           |
| Northern Offshore Drilling Ltd.....         | Dunville, Ont.....    | 1           |
| Patterson, L. G. Drilling Co. Ltd.....      | Wallaceburg, Ont..... | 3           |
| Place Gas and Oil Co. Ltd.....              | Toronto, Ont.....     | 1           |
| Rawlings Drilling Co. Ltd.....              | Chatham, Ont.....     | 2           |
| Riddell, R.....                             | Ridgeway, Ont.....    | 1           |
| Rose, W.....                                | Port Rowan, Ont.....  | 1           |
| Shaw, W.....                                | Merlin, Ont.....      | 1           |
| Smelser, I. and Sons.....                   | Jarvis, Ont.....      | 1           |
| Stevenson, E. Morgan, Drilling Co. Ltd..... | Thamesville, Ont..... | 1           |
| Stear, E.....                               | Jarvis, Ont.....      | 1           |
| Stubble & Stubble.....                      | Merlin, Ont.....      | 3           |
| Thompson, D.....                            | Nanticoke, Ont.....   | 1           |
| Underwater Gas Developers Ltd.....          | Toronto, Ont.....     | 1           |
| Union Gas Company of Canada Ltd.....        | Chatham, Ont.....     | 8           |
| Union Rotary Drillers of Canada Ltd.....    | Corunna, Ont.....     | 1           |

TABLE J — HOLDERS OF WELL PERMITS IN 1963

| NAME   | ADDRESS          |
|--|------------------|
| Allgeany Producing Corp.....                   | Wellsville, N.Y. |
| Anchor Petroleum Ltd.....                      | Toronto, Ont.    |
| Anthony Gas and Oil Exploration Ltd.....       | Acton, Ont.      |
| Barchild Investments Ltd.....                  | Hamilton, Ont.   |
| Barnett, A. D.....                             | Wichita, Kansas  |
| Bengal Development Corp. Ltd.....              | Toronto, Ont.    |
| B-F & Associates.....                          | Plymouth, Mich.  |
| B P Explorations Ltd.....                      | London, Ont.     |
| Black Cloud Development Corp.....              | Warren, Mich.    |
| Bluewater Oil & Gas Co. Ltd.....               | London, Ont.     |
| Bradford and Mayo.....                         | Chatham, Ont.    |
| Brennan, R. J.....                             | Petrolia, Ont.   |
| Brien, J. B. & Associates.....                 | Toronto, Ont.    |
| British American Oil Co. Ltd.....              | Toronto, Ont.    |
| British Petroleum Exploration Canada, Ltd..... | London, Ont.     |
| Brockman, H. L.....                            | Olney, Ill.      |
| Canada Cities Service Petroleum Corp.....      | Calgary, Alta.   |
| Canadian Delhi Oil Ltd.....                    | London, Ont.     |
| Canadian Essex Oil Co.....                     | London, Ont.     |
| Canadian Kewanee Ltd.....                      | Calgary, Alta.   |
| Carr, W. P.....                                | Chatham, Ont.    |
| Central Pipe Line Co.....                      | Aylmer, Ont.     |
| Coppinger, W. J.....                           | Wichita, Kansas  |
| Earl, S.....                                   | Kerrwood, Ont.   |
| Eckford & Whitty.....                          | Petrolia, Ont.   |

TABLE J — HOLDERS OF WELL PERMITS IN 1963 — *Continued.*

| NAME  | ADDRESS                |
|---|------------------------|
| Elgin Petroleums Corp. Ltd.....               | Rodney, Ont.           |
| Electric Reduction Co. of Canada Ltd.....     | Toronto, Ont.          |
| Emery English Drilling Co.....                | Port Lambton, Ont.     |
| Feinberg, B.....                              | Evansville, Indiana    |
| Filton Realty Ltd.....                        | London, Ont.           |
| Finney, A. D.....                             | Plymouth, Mich.        |
| Haldimand Gas & Oil Wells Ltd.....            | Cayuga, Ont.           |
| Home Oil Co. Ltd.....                         | Calgary, Alta.         |
| Howell, H.....                                | Brantford, Ont.        |
| Imperial Oil Ltd.....                         | Chatham, Ont.          |
| Irving, D.....                                | Simcoe, Ont.           |
| Jarvis Hereford Farms.....                    | Jarvis, Ont.           |
| Lincoln Natural Gas Ltd.....                  | Dunnville, Ont.        |
| Lorn-Mac Gas & Oil Syndicate.....             | Tillsonburg, Ont.      |
| Lyons, S. & Sons.....                         | Simcoe, Ont.           |
| McClea & White.....                           | Detroit, Mich.         |
| McMaster-Kewanee.....                         | Calgary, Alta.         |
| McMaster, R. and Sons Co. Ltd.....            | Caledonia, Ont.        |
| Mitchell, G. & Associates.....                | Chatham, Ont.          |
| Mitchell & Mitchell Properties Inc.....       | Chatham, Ont.          |
| Nemec & Pere Marquette.....                   | Chatham, Ont.          |
| Nemec & Scott.....                            | Chatham, Ont.          |
| Noranda Mines Ltd.....                        | Toronto, Ont.          |
| Okol Oil & Gas Co.....                        | Tulsa, Okla.           |
| Peruvian Oil & Minerals Inc.....              | Toronto, Ont.          |
| Place Gas & Oil Co. Ltd.....                  | Toronto, Ont.          |
| Ram Petroleum Ltd.....                        | Chatham, Ont.          |
| Riddell, Hanna Exploration.....               | Highland Park, Mich.   |
| Roberts, C.....                               | Coudersport, Pa.       |
| Roth & Roth Ltd.....                          | Petrolia, Ont.         |
| Salina Gas & Oil Co.....                      | Chatham, Ont.          |
| Spelman, Prentice & Associates.....           | Tarrytown, N.Y.        |
| Starlite Gas Co. Ltd.....                     | Lake Erie County, N.Y. |
| Stover, J. A.....                             | Ridgetown, Ont.        |
| Thedford Oil & Gas Exploration Syndicate..... | Ancaster, Ont.         |
| Tobacco Road Oil Co.....                      | Wellsville, N.Y.       |
| Union Gas Co. of Canada, Ltd.....             | Chatham, Ont.          |
| United Reef Petroleums Ltd.....               | Chatham, Ont.          |
| Wallis-Auld Syndicate.....                    | Watford, Ont.          |
| Wellandport Gas Co. Ltd.....                  | Dunnville, Ont.        |
| Westburne Oil & Development Ltd.....          | Toronto, Ont.          |
| West Point Syndicate.....                     | Toronto, Ont.          |
| Whitty, J. N.....                             | Chatham, Ont.          |
| York Producing Co. Ltd.....                   | Bolivar, N.Y.          |

TABLE K — SUCCESSFUL EXPLORATORY TESTS, 1963

| Map Index | Well Name               | Location Township, County | Compl. Date | Total Depth | Initial Production | Producing Formation | Deepest Formation Penetrated | Expl. Class |
|-----------|-------------------------|---------------------------|-------------|-------------|--------------------|---------------------|------------------------------|-------------|
| A         | S. Earl — Duart No. 1   | Orford, Kent              | 19 Nov.     | 4,135       | 5 B.O.P.D.         | Cambrian            | Precambrian                  | NF          |
| B         | B.P. — Sombra-15-XV     | Sombra, Lambton           | 19 Feb.     | 2,339       | 580 Mcf/D          | Guelph              | Rochester                    | NF          |
| C         | Can. Delhi — Tye No. 1  | Moore, Lambton            | 23 Dec.     | 2,335       | 25 B.O.P.D.        | Salina              | Rochester                    | NP          |
| D         | Earl-Tostik No. 2       | Brooke, Lambton           | 27 Dec.     | 2,046       | 150 B.O.P.D.       | Guelph              | Guelph                       | NF          |
| E         | A. Barnett-Rowson No. 1 | Dereham, Oxford           | 1 July      | 3,345       | 10 B.O.P.D.        | Cambrian            | Precambrian                  | NF          |
| F         | Roberts-Docker No. 1    | Middleton, Norfolk        | 29 Jan.     | 3,512       | 80 Mcf/D           | Reynales            | Cambrian                     | NF          |
| G         | B-F & Assoc. No. 3      | Windham, Norfolk          | 15 Aug.     | 1,117       | 483 Mcf/D          | Thorold & Grimsby   | Cabot Head                   | NP          |
| H         | Lyons — Lee No. 1       | Townsend, Norfolk         | 20 June     | 941         | 39 Mcf/D           | Thorold             | Cabot Head                   | Ext.        |
| I         | Mitchell — 481-14       | Lake Erie, Norfolk        | 27 July     | 1,775       | Unknown            | Thorold & Grimsby   | Cabot Head                   | NF          |
| J         | Mitchell — 393-6        | Lake Erie, Norfolk        | 2 July      | 1,630       | 132 Mcf/D          | Thorold & Grimsby   | Cabot Head                   | NF          |
| K         | Mitchell — 380-7        | Lake Erie, Norfolk        | 23 June     | 1,617       | 756 Mcf/D          | Thorold & Grimsby   | Cabot Head                   | NF          |
| L         | Mitchell — 343-8        | Lake Erie, Norfolk        | 17 June     | 1,535       | 1,282 Mcf/D        | Thorold & Grimsby   | Cabot Head                   | NP          |
| M         | Mitchell — 202-11       | Lake Erie, Norfolk        | 9 Aug.      | 1,140       | 524 Mcf/D          | Thorold & Grimsby   | Cabot Head                   | NP          |
| N         | Mitchell — 332-9        | Lake Erie, Norfolk        | 8 June      | 1,521       | 184 Mcf/D          | Grimsby             | Cabot Head                   | NP          |
| O         | Place-Walpole No. 42    | Lake Erie, Haldimand      | 24 July     | 1,016       | 247 Mcf/D          | Reynales & Thorold  | Queenston                    | NP          |
| P         | Mitchell — 208-12       | Lake Erie, Haldimand      | 20 Aug.     | 1,083       | 2,900 Mcf/D        | Thorold & Grimsby   | Cabot Head                   | NP          |
| Q         | Mitchell — 202-13       | Lake Erie, Haldimand      | 27 Aug.     | 1,094       | 1,147 Mcf/D        | Grimsby             | Cabot Head                   | Ext.        |
| R         | Mitchell — 212-3        | Lake Erie, Haldimand      | 1 June      | 1,276       | 250 Mcf/D          | Grimsby             | Cabot Head                   | NP          |
| S         | Mitchell — 214-4        | Lake Erie, Haldimand      | 16 May      | 1,243       | 187 Mcf/D          | Grimsby             | Cabot Head                   | NP          |

TABLE L — IMPORTANT DRY EXPLORATORY TESTS, 1963

| Map Index | Well Name                     | Location<br>Township, County | Results           | Completion<br>Date | Total<br>Depth | Deepest<br>Formation<br>Penetrated | Expl.<br>Class |
|-----------|-------------------------------|------------------------------|-------------------|--------------------|----------------|------------------------------------|----------------|
| 1         | Home Oil — Walpole No. 1      | Walpole I.R., Lambton        | Dry               | 7 Nov.             | 3,788          | Precambrian                        | NF             |
| 2         | United Reef — Bennell No. 1   | Howard, Kent                 | Dry               | 27 Aug.            | 4,097          | Precambrian                        | NF             |
| 3         | British American — M.I.R. 1   | Orford, Kent                 | Show of Gas       | 26 Feb.            | 3,968          | Precambrian                        | NF             |
| 4         | Allegany Prod. — Bartok No. 1 | Orford, Kent                 | Dry               | 14 Feb.            | 4,022          | Precambrian                        | NF             |
| 5         | Lynwood Securities No. 1      | Orford, Kent                 | Trace of oil      | 3 April            | 4,129          | Precambrian                        | NP             |
| 6         | Imperial Oil No. 847          | Aldborough, Elgin            | Shows of gas, oil | 28 June            | 3,993          | Precambrian                        | NF             |
| 7         | Can. Delhi — Carroll No. 1    | Ekfrid, Middlesex            | Dry               | 30 Oct.            | 3,612          | Precambrian                        | NF             |
| 8         | Canadian Oil — Reive No. 1    | Dunwich, Elgin               | Shows of gas, oil | 13 April           | 3,836          | Precambrian                        | NF             |
| 9         | Can. Delhi — Beherall No. 1   | Southwold, Elgin             | Dry               | 24 Aug.            | 3,576          | Precambrian                        | NF             |
| 10        | Imperial Oil No. 850          | Yarmouth, Elgin              | Dry               | 31 July            | 3,483          | Precambrian                        | NF             |
| 11        | Imperial Oil No. 842          | Norwich N., Oxford           | Dry               | 17 April           | 3,071          | Precambrian                        | NF             |
| 12        | Roberts — Docker No. 1        | Middleton, Norfolk           | Dry               | 29 Jan.            | 3,512          | Precambrian                        | NF             |
| 13        | West Point Synd. No. 1        | Brantford, Brant             | Dry               | 15 June            | 2,690          | Precambrian                        | NF             |
| 14        | McMaster — Stewart No. 4      | Onondaga, Brant              | Show of oil       | 10 May             | 2,671          | Precambrian                        | DPT            |
| 15        | Imperial Oil No. 834          | Flamborough, Wentworth       | Show of oil       | 26 Jan.            | 2,387          | Precambrian                        | NF             |

## **The Clearville Field**

### **Introduction**

Prior to the discovery of the Gobles Field in February, 1960, little attention was given to the Cambrian rocks of Ontario as a target for petroleum and natural gas exploration. Since that time, a great deal of interest has been focused on the Upper Cambrian rocks underlying part of Southwestern Ontario; this is especially true for the onshore regions of the approximately 11,000 square miles situated between the International Boundary on the south and a line drawn from Toronto to Walpole Island. This interest has led to the discovery of nine more productive hydrocarbon accumulations and many more gas and oil shows. Among these discoveries, the Clearville Field located in the southeastern corner of Orford Township, Kent County, about 1 mile north of the Lake Erie shoreline, is by far the most significant. This field is somewhat unique in that hydrocarbons occur in a subdued erosional remnant associated with post Middle Devonian faulting. The overlying and down faulted beds of the Middle Ordovician Black River group provide the cap rock.

Apart from this field, most of the Cambrian exploration in Ontario has been aimed at delineating the erosional pinch out edge in hope of finding additional oil and gas pools such as Gobles.

### **Stratigraphy**

Although the increase in deeper drilling has resulted in better well control in this area, the regional configuration and stratigraphic sequence of the Upper Cambrian rocks has altered very little from that described by Sanford (1962) and Sanford and Quillian (1959). The northwestern limits of these rocks represents an erosional edge onlapping the Precambrian high of the Algonquin Arch along a general line from Hamilton to Walpole Island, and thickening south-eastward into the Appalachian Basin where they are estimated to be in excess of 500 feet off Long Point at the International Boundary (Sanford, 1962).

All three Upper Cambrian formations recognized in Southwestern Ontario are represented in the Clearville area. In ascending order, the Mt. Simon is a buff to grey, basal quartzose sandstone containing medium to coarse, well rounded and frosted sand grains, frequently characterized by a few feet of arkose at the base immediately overlying the Precambrian. This unit attains a thickness of about 12 feet in the Clearville area and can be easily recognized from well samples and gamma ray-neutron logs.

The overlying Eau Claire formation consists of a medium grey to brown, fine — to medium — grained dolomitic sandstone with interbedded sandy dolo-

mite. It contains sub-angular to angular quartz grains and varies in thickness from 10 to 15 feet in the Clearville area.

The succeeding Trempealeau formation is comprised of a buff, to brown and grey, fine — to medium — crystalline dolomite, frequently containing well rounded floating quartz grains and numerous sandstone interbeds. The dolomite portions contain numerous bands of pseudo-pelletoidal beds which have good pin-point vugular porosity. This formation is approximately 80 feet thick in the Clearville area.

Immediately overlying and resting unconformably on the Trempealeau is a layer of "green sandstone" varying in thickness from 5 to 16 feet and consisting of medium to coarse, well-rounded and frosted quartz grains with a silty matrix. It contains much glauconite and pyrite and commonly has thin bands of shale and dolomite. Well cuttings from this zone consist mainly of loose quartz grains making it easily recognizable as such throughout the surrounding area. Although regional distribution and correlation remains uncertain for this report, it is included in the Upper Cambrian. In turn, this unit is overlain by the Shadow Lake formation of the Middle Ordovician Black River group.

Figure 1 illustrates the generalized lithologies and thicknesses of the Upper Cambrian and the Middle Ordovician Black River group in the Clearville Field. Structure contours on the top of the Trempealeau formation and the "green sandstone" isopach for the same area are shown in figures 2 and 3 respectively.

## **Structure**

Hydrocarbon accumulation in the Clearville Field is located in a subdued erosional remnant of the Trempealeau formation associated with post Middle Devonian faulting. The west side is marked by a north-northwest trending normal fault (figure 1 and 2) having a vertical displacement of about 130 feet and extending northward to intersect the east-west striking Electric fault near the Thames River. Caley (1943) first described this fault to explain the sharp break in the subsurface elevation on the top of the Middle Devonian carbonate now commonly known as the Delaware. This fault zone is coincident with a thick Bass Island section in the Upper Silurian which results from early salt leaching from the Salina beds.

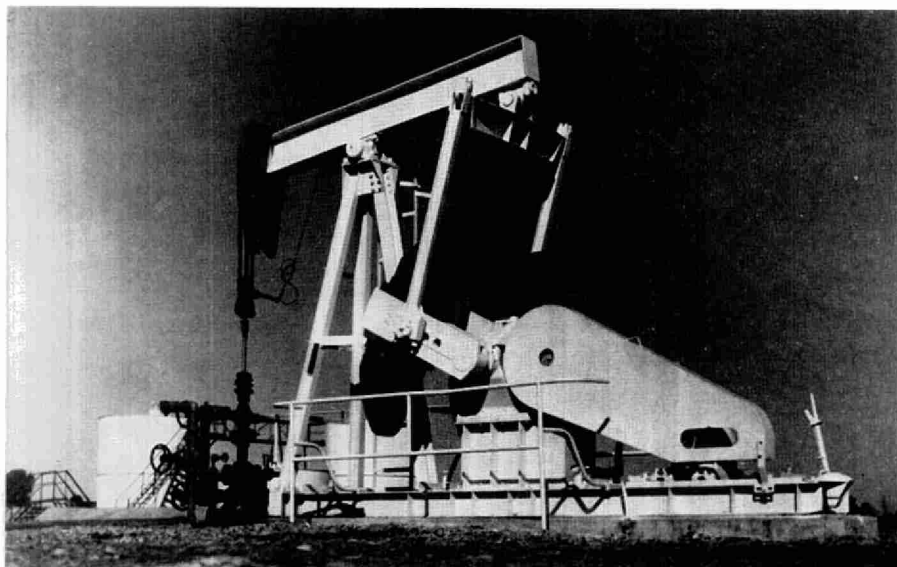
The east side of the field is flanked by a somewhat parallel fault having a vertical displacement varying from 20 to 40 feet. Immediately east of this fault, two deep tests in Lot A, Con. 12, Aldborough twp. Elgin County, indicate a northward dip; this may suggest local movement along an east-west fracture zone intersecting these faults on the north side of the field. Projected structure contours on the top of the Trempealeau do not indicate closure on that end.

### Drilling and Production

The discovery well, Tobacco Road Oil No. 1, located in lot 55, Con. S.T.R., Orford twp., Kent County, encountered the Cambrian at a depth of 3931 (—3282) feet and was completed with a natural initial flow of 250 BOPD through the casing from the interval 3954 to 3963 feet. It was drilled in February, 1962, by C. D. Whorton and produced approximately 20,000 barrels of oil during the first 6 months. As of June 1964, 17 wells have been completed as oil producers on 50 acre spacing with one dry hole on the south, one on the west, and two on the east, immediately outside the fault zone. One stepout about  $\frac{3}{4}$  of a mile to the southwest found the Cambrian on the downthrown side of the north-northwest trending fault, 144 feet lower than the discovery well. Another stepout,  $\frac{1}{2}$  mile to the northwest has been suspended at a depth of 4098 feet; further information on this well remains confidential at time of writing (June, 1964).

During 1963, the Clearville Field surpassed the Devonian Rodney Field as Ontario's largest oil producer accounting for 19.4 percent of the province's crude oil production. As of December 31, 1963, the total cumulative production was 333,720 barrels of oil with an average of 43 barrels per day per well for that month.

Some of the wells were originally produced by natural flow, but waxing conditions necessitated the installation of pumps equipped with scraper rods. Only a few of the wells required acid or fracture stimulation as many of them yielded over 100 barrels per day naturally. Varying amounts of natural gas and salt water are produced requiring fluid separation and treatment prior to refining. The gravity of the oil is 38.8 API degrees.



Producing well Clearville Field



DEPARTMENT OF ENERGY RESOURCES  
PROVINCE OF ONTARIO  
TABLE E—SUMMARY OF WELL COMPLETIONS, 1963

| COUNTY — TOWNSHIP    | EXPLORATORY    |                |                |       |         | DEVELOPMENT |                 |                |       |         | OTHER      |                |         |
|----------------------|----------------|----------------|----------------|-------|---------|-------------|-----------------|----------------|-------|---------|------------|----------------|---------|
|                      | Gas            | Oil            | Dry            | Total | Footage | Gas         | Oil             | Dry            | Total | Footage | No.        | Type           | Footage |
| BRANT                |                |                |                |       |         |             |                 |                |       |         |            |                |         |
| Brantford.....       |                |                | 1              | 1     | 2,690   |             |                 |                |       |         |            |                |         |
| Burford.....         |                |                | 3              | 3     | 8,682   |             | 5               |                | 5     | 14,438  |            |                |         |
| Onondaga.....        |                |                | 2              | 2     | 5,331   | 1           |                 |                | 1     | 512     |            |                |         |
| ELGIN                |                |                |                |       |         |             |                 |                |       |         |            |                |         |
| Aldborough.....      |                |                | 3 <sup>1</sup> | 3     | 5,948   | 1           | 4               | 5              | 10    | 12,037  | 4          | W.I.           | 1,677   |
| Bayham.....          |                |                |                |       |         | 1           |                 |                | 1     | 1,416   |            |                |         |
| Dunwich.....         |                |                | 3              | 3     | 11,623  |             |                 | 3              | 3     | 4,456   |            |                |         |
| Southwold.....       |                |                | 1              | 1     | 3,576   |             |                 |                |       |         |            |                |         |
| Yarmouth.....        |                |                | 1              | 1     | 3,483   |             |                 |                |       |         |            |                |         |
| ESSEX                |                |                |                |       |         |             |                 |                |       |         |            |                |         |
| Colchester S.....    |                |                | 1              | 1     | 2,428   |             |                 |                |       |         |            |                |         |
| Gosfield S.....      |                |                |                |       |         |             |                 | 1              | 1     | 2,569   |            |                |         |
| Lake Erie.....       |                |                | 1              | 1     | 1,021   |             |                 |                |       |         |            |                |         |
| Malden.....          |                |                | 1              | 1     | 2,720   |             |                 | 1 <sup>2</sup> | 1     | 2,583   |            |                |         |
| HALDIMAND            |                |                |                |       |         |             |                 |                |       |         |            |                |         |
| Cayuga N.....        |                |                |                |       |         | 9           |                 | 1              | 10    | 8,452   |            |                |         |
| Lake Erie.....       | 5              |                | 1              | 6     | 6,964   | 6           |                 | 4              | 10    | 9,745   |            |                |         |
| Sherbrooke.....      |                |                |                |       |         | 2           |                 |                | 2     | 1,738   |            |                |         |
| Walpole.....         |                |                |                |       |         |             |                 | 1              | 1     | 950     |            |                |         |
| HALTON               |                |                |                |       |         |             |                 |                |       |         |            |                |         |
| Esquesing.....       |                |                |                |       |         |             |                 | 3              | 3     | 5,918   |            |                |         |
| HURON                |                |                |                |       |         |             |                 |                |       |         |            |                |         |
| Stephen.....         |                |                | 2              | 2     | 3,782   |             |                 |                |       |         |            |                |         |
| KENT                 |                |                |                |       |         |             |                 |                |       |         |            |                |         |
| Chatham.....         |                |                | 1              | 1     | 1,977   |             |                 | 1              | 1     | 1,690   |            |                |         |
| Howard.....          |                |                | 1              | 1     | 4,097   |             |                 |                |       |         |            |                |         |
| Orford.....          |                | 1              | 6              | 7     | 28,265  |             | 10 <sup>3</sup> |                | 10    | 39,772  | { 1<br>1 } | S.T.<br>D. }   | 1,384   |
| LAMBTON              |                |                |                |       |         |             |                 |                |       |         |            |                |         |
| Bosanquet.....       |                |                | 1              | 1     | 2,432   |             |                 |                |       |         |            |                |         |
| Brooke.....          |                | 1 <sup>4</sup> | 2              | 3     | 5,892   |             |                 |                |       |         |            |                |         |
| Dawn.....            |                |                | 5              | 5     | 10,035  |             | 4               | 2              | 6     | 11,828  |            |                |         |
| Enniskillen.....     |                |                | 2              | 2     | 4,515   |             | 1               |                | 1     | 480     | 1          | C.T.           | 401     |
| Euphemia.....        |                |                |                |       |         |             |                 | 2              | 2     | 780     |            |                |         |
| Moore.....           |                | 1              | 9              | 10    | 24,125  |             | 1               | 2 <sup>5</sup> | 3     | 2,859   | 1          | C.T.           | 499     |
| Plympton.....        |                |                | 3              | 3     | 7,913   |             |                 |                |       |         |            |                |         |
| Sarnia.....          |                |                | 2              | 2     | 5,314   |             |                 |                |       |         | 1          | P.S.           | 2,392   |
| Sombra.....          | 1              |                | 2              | 3     | 6,775   |             | 2               | 3              | 5     | 10,375  | { 2<br>2 } | W.I.<br>W.S. } | 5,882   |
| Walpole Island.....  |                |                | 1              | 1     | 3,788   |             |                 |                |       |         |            |                |         |
| Warwick.....         |                |                | 6              | 6     | 13,139  |             |                 |                |       |         | 1          | S.T.           | 394     |
| MIDDLESEX            |                |                |                |       |         |             |                 |                |       |         |            |                |         |
| Ekfrid.....          |                |                | 2              | 2     | 4,214   |             |                 |                |       |         |            |                |         |
| McGillivray.....     |                |                | 1              | 1     | 1,946   |             |                 |                |       |         |            |                |         |
| Mosa.....            |                |                |                |       |         | 2           |                 |                | 2     | 3,144   |            |                |         |
| NORFOLK              |                |                |                |       |         |             |                 |                |       |         |            |                |         |
| Charlottesville..... |                |                |                |       |         | 4           |                 |                | 4     | 5,298   |            |                |         |
| Lake Erie.....       | 6              |                | 2              | 8     | 12,638  | 6           |                 | 4              | 10    | 13,603  |            |                |         |
| Middleton.....       | 1 <sup>6</sup> |                | 1              | 2     | 6,923   |             |                 |                |       |         |            |                |         |
| Townsend.....        | 1              |                | 1              | 2     | 1,900   |             |                 | 2              | 2     | 1,951   |            |                |         |
| Walsingham S.....    |                |                |                |       |         |             |                 | 1              | 1     | 1,473   |            |                |         |
| Windham.....         | 1              |                | 3              | 4     | 3,509   | 4           |                 |                | 4     | 4,388   |            |                |         |
| OXFORD               |                |                |                |       |         |             |                 |                |       |         |            |                |         |
| Blandford.....       |                |                |                |       |         |             |                 | 1              | 1     | 2,889   |            |                |         |
| Blenheim.....        |                |                |                |       |         |             | 1               |                | 1     | 2,918   |            |                |         |
| Dereham.....         |                | 1              |                | 1     | 3,345   |             |                 |                |       |         |            |                |         |
| Norwich N.....       |                |                | 1              | 1     | 3,071   |             |                 |                |       |         |            |                |         |
| PERTH                |                |                |                |       |         |             |                 |                |       |         |            |                |         |
| Blanshard.....       |                |                | 1              | 1     | 1,152   |             |                 |                |       |         |            |                |         |
| WELLAND              |                |                |                |       |         |             |                 |                |       |         |            |                |         |
| Wainfleet.....       |                |                |                |       |         | 6           |                 |                | 6     | 3,906   |            |                |         |
| Willoughby.....      |                |                |                |       |         |             |                 | 1              | 1     | 575     |            |                |         |
| WENTWORTH            |                |                |                |       |         |             |                 |                |       |         |            |                |         |
| Beverly.....         |                |                |                |       |         |             |                 | 1              | 1     | 2,410   |            |                |         |
| Flamborough W.....   |                |                | 1              | 1     | 2,387   |             |                 |                |       |         |            |                |         |
| TOTALS.....          | 15             | 4              | 74             | 93    | 217,600 | 42          | 28              | 39             | 109   | 175,153 | 14         |                | 12,629  |

S.T. — Structure Test.

GRAND TOTAL = 216 Completions — 405,382 feet

W.I. = Water Injection.

D = Disposal.

C.T. = Core Test.

W.S. = Water Source.

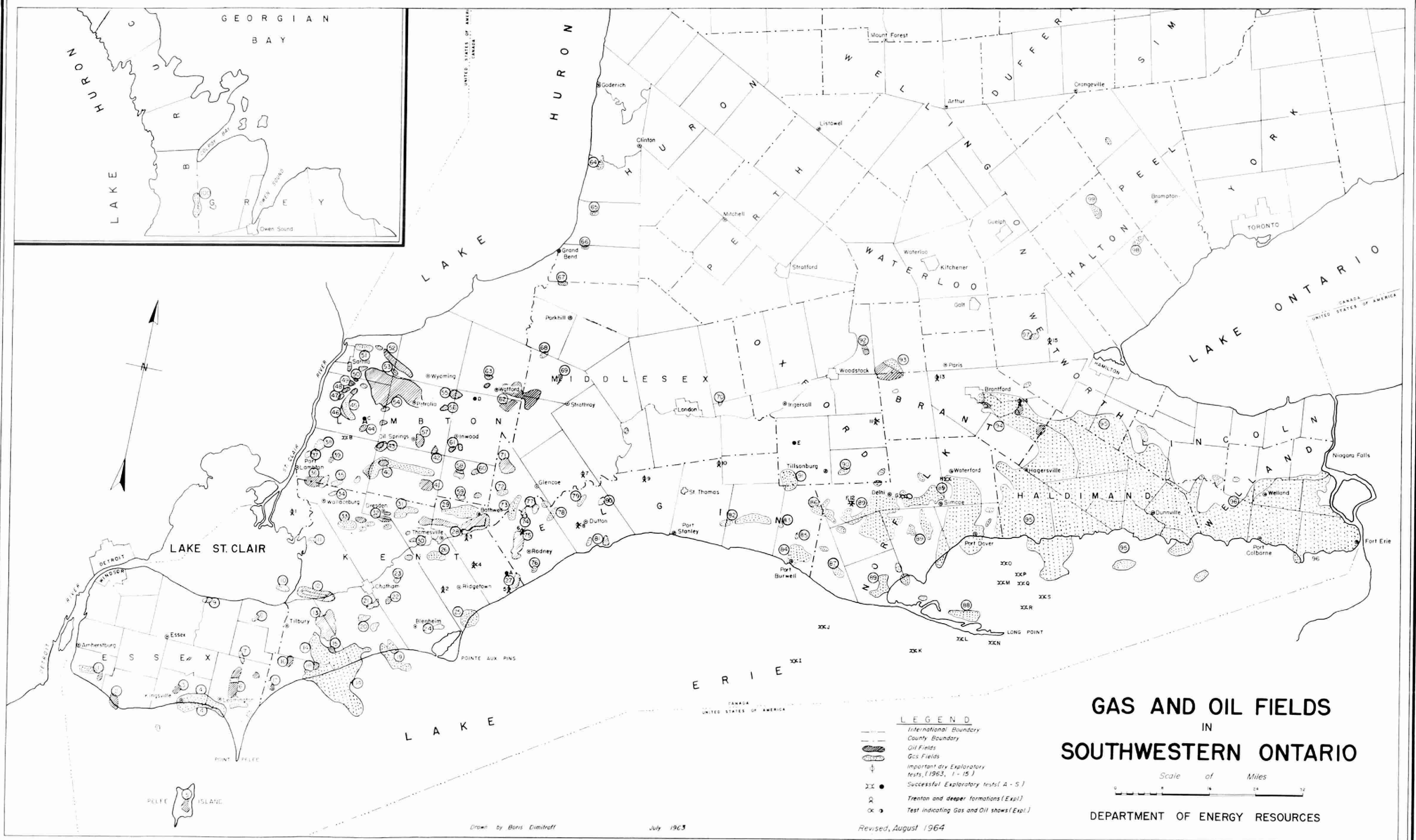
P.S. = Petroleum Products Storage.

W.D.B. — B.D.

Notes to Drilling Summary

- (1) Includes one deepening to Cambrian, previously suspended in Upper Ordovician.  
(2) Converted to a disposal well.  
(3) One well found and produced Trenton oil then was deepened to Cambrian. Could be classed as non-commercial shallower pool discovery.  
(4) Commercial potential not apparent, until stimulated in February 1964.  
(5) Deepenings, A1 to Guelph, Seckerton pool.  
(6) Cambrian test which found Silurian gas.

FIGURE No. 2



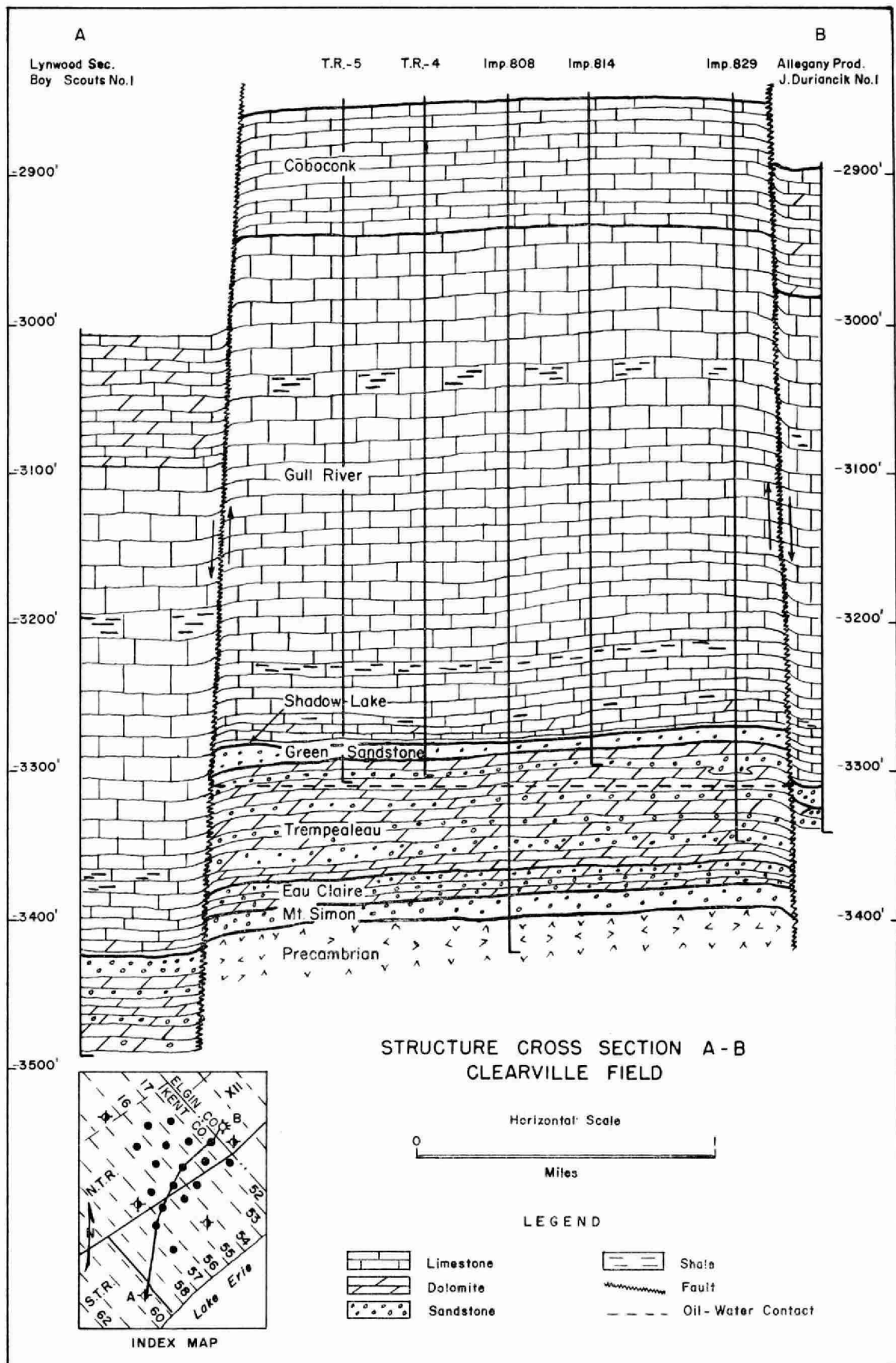


FIGURE 1

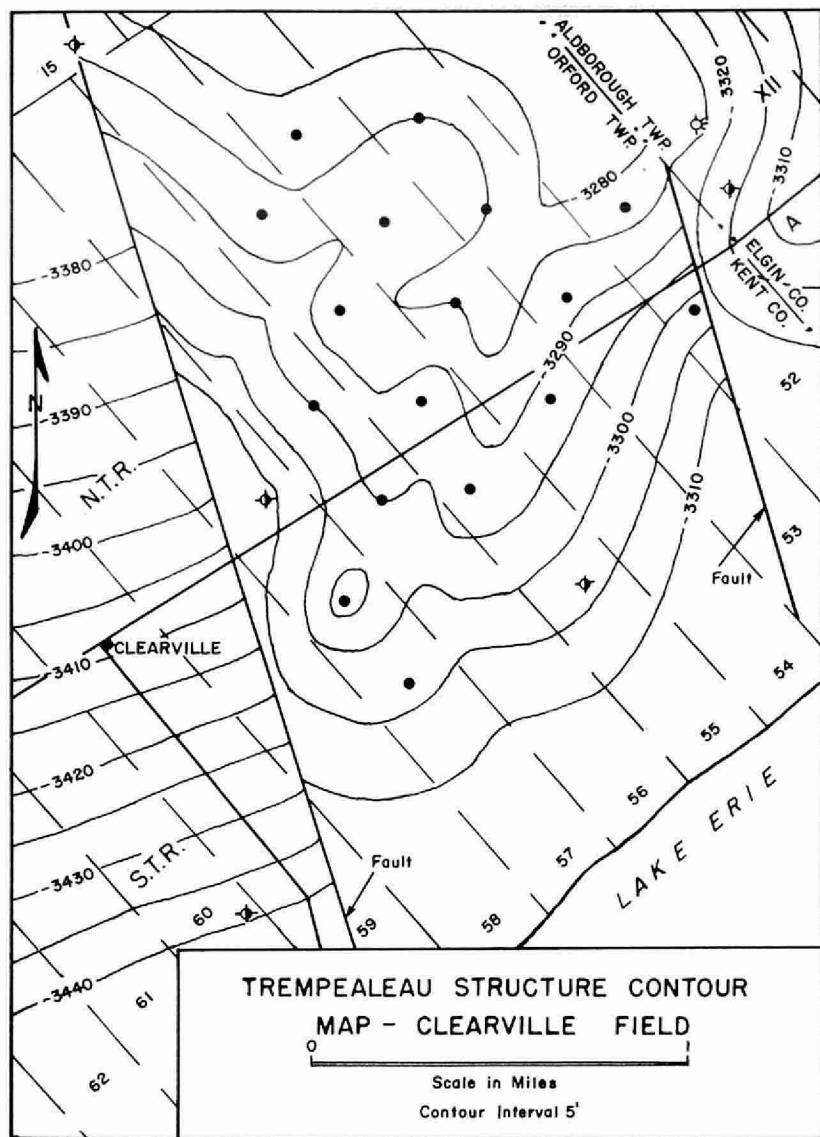


FIGURE 2

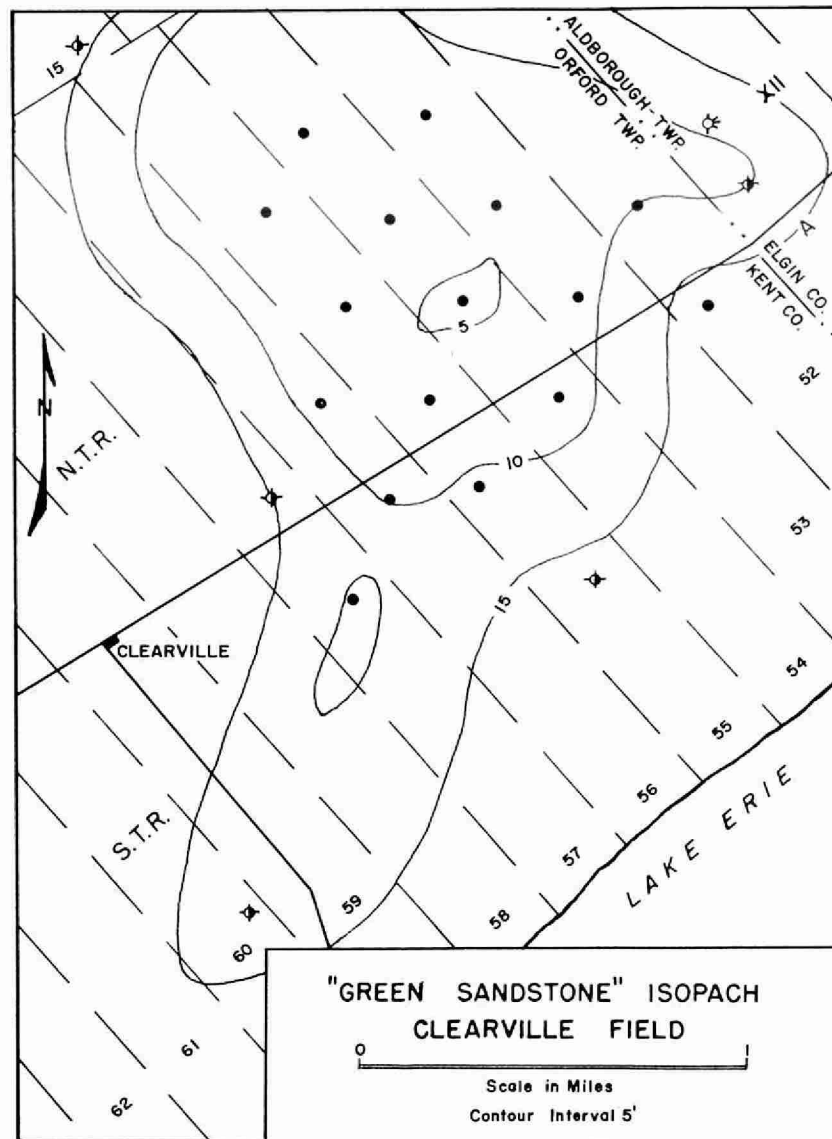


FIGURE 3

It is significant to note that one of the development wells, Tobacco Road Oil No. 6, located in Lot 57, Con. S.T.R. was initially completed as an oil producer from a fractured zone in the lower portion of the Kirkfield formation (Middle Ordovician Trenton group) at a depth of 3472–3487 feet but later deepened to become a Cambrian oil well.

### **Reservoir Rocks**

Production in the Clearville Field is obtained from the interfingering dolomitic sandstone and sandy dolomite occurring in the uppermost part of the Trempealeau formation. Although a few wells record initial shows and production from the overlying “green sandstone”, it is generally impermeable, and along with the Shadow Lake and the down faulted Gull River beds, provides the cap rock. Figure 3 illustrates the thinning of this unit in the centre of field and thickening on the outer fringes to drape over the eroded Trempealeau.

Although the sandstones facies have a better development of porosity and permeability many of the dolomite zones contain pseudopelletoidal bands which have excellent vertical permeability and constitute a significant part of the reservoir. The net pay thickness is in the order of 10 feet with an average porosity of 12 per cent. Gas in solution coupled with a strong water drive have maintained a relatively high reservoir pressure. An oil-water contact has been established at about —3311 feet and the original formation pressure was recorded at 1,725 PSI (Oakley, 1963).

Ultimate recoverable reserves have been estimated at two million barrels (MacKay and O'Shea, 1963).

### **Conclusions**

Exploration for hydrocarbons in the Upper Cambrian rocks in Southwestern Ontario has reached an alltime high, and with the addition of three new discoveries in the first 5 months of 1964, this pace should be maintained with rewarding results. The Clearville Field itself, although geographically small (approximately 1000 acres), is not entirely developed and should prove to be one of Ontario's best oil producers. Only 7 wells have penetrated the Upper Cambrian rocks underlying the Canadian waters of the Great Lakes, and the nearest test to the Clearville Field is more than 50 miles distant. This area, plus much of the onshore acreage, requires full evaluation.

As an exploration tool, magnetic, gravity and seismic surveys have been disappointing. The best guide is detailed subsurface mapping utilizing the control obtained from the many shallower tests and the information acquired from

regional and local drilling which includes samples, cores, mechanical logs, and accurate pressure records.

### Acknowledgments

The writer is indebted to B. V. Sanford of the Geological Survey of Canada for suggestions and criticism during the preparation of this report. He also wishes to thank his colleagues of the Energy Branch of this department who have helped supply and prepare the data. In addition, he extends his appreciation to the Geological Survey of Canada for the use of its facilities and accommodation.

### Selected Bibliography

- Adams, J. (1964), Economics of Trempealeau Production; Producers Monthly, March issue.
- Burgess, R. J. (1962), Cambrian Hydrocarbon Traps on the Northwest Rim of the Appalachian Basin; 1st Annual Conference, Ontario Petroleum Institute.
- Caley, J. F. (1943), Palaeozoic Geology of the London Area, Ontario; Geol. Surv., Canada, Mem. 237.
- Calvert, W. L., (1962), Sub-Trenton Rocks of the Cincinnati Arch Geologic Province, Geol. Soc. America Special Paper 68, p. 144-145, (abstract).
- Calvert, W. L., (1964), Pre-Trenton Sedimentation and Dolomitization, Cincinnati Arch. Province: Theoretical Considerations; Bull. Amer. Assoc. Petrol. Geol., Vol. 48, No. 2.
- Gardiner, F. J. (1962), Bottom of the Column Lures Eastern Canadians; Oil and Gas Jour., Vol. 60, No. 38.
- MacKay, A. E. and O'Shea, H. J. (1963), Ontario Production and Reservoir Characteristics; 2nd Annual Conference, Ontario Petroleum Institute.
- Milne, J. E. S., Sanford, B. V., and MacEachern, S. B., (1963), Developments in Eastern Canada in 1962; Bull. Amer. Assoc. Petrol. Geol., Vol. 49, No. 6.
- Milne, J. E. S. and Howie, R. D., (1964), Developments in Eastern Canada in 1963; Bull. Amer. Assoc. Petrol. Geol. Vol. 48, No. 6.
- Oakley, K. A., (1963), Developments in Oil and Natural Gas Production Southwestern Ontario; Jour. of Can. Petrol. Technology, Can. Instit. Mining and Metallurgy, Vol. 2, No. 4.
- Ontario Department of Energy Resources, Annual Report, 1960 to 1962 inclusive.
- Sanford, B. V. (1962), Sources and Occurrences of Oil and Gas in the Sedimentary Basins of Ontario, Proc. Geol. Assoc. of Canada, Vol. 14.
- Sanford, B. V., and Quillian, R. G. (1959), Subsurface Stratigraphy of the Upper Cambrian Rocks in Southwestern Ontario, Geol. Surv., Canada, Paper 58-12.
- Sharp, D. A., (1963), Index of Ordovician and Cambrian Wells drilled in Southwestern Ontario Prior to 1963; Ont. Dept. of Energy Resources.
- Sitler, G. F. Jr., (1964), Trempealeau Exploration in Ohio, Producers Monthly, March issue.
- Wagner, W. R., (1962), Subsurface Cambro-Ordovician Stratigraphy of Northwestern Pennsylvania and Bordering States; Penn. Geol. Surv., Fourth Series, Prog. Rept. No. 156.
- Wehmeyer, K. L., and Sitler, G. F., Jr., (1962), Ohio Offers Big Potential from the Bottom of the Column; Oil and Gas Jour., Vol. 60, No. 2.
- Whorton, C. D., (1962), Cambrian Strike Enhances Southwestern Ontario; Oil and Gas Jour., Vol. 60, No. 38.
- Woodward, H. P., (1961), Preliminary Subsurface Study of Southeastern Appalachian Interior Plateau; Bull. Amer. Assoc. Petrol. Geol., Vol. 45, No. 10.



## Section 4 — Logs of Wells for 1963

### Introduction

The following tabulation of geological logs lists all wells drilled for gas and oil in Ontario and completed in 1963. It also includes those wells for such associated purposes as injection programs, structure tests, storage, etc. Also included are previously drilled wells that were deepened and penetrated a lower geological formation.

Approximately one quarter of all the wells drilled were completed in the Trenton or older rocks.

It should be noted that lake well locations, as well as some land locations, are described by co-ordinates given in terms of latitude and longitude.

Copies of these logs showing more detail are available from the Department at 25¢ each.

### Abbreviations

|                |   |
|----------------|---|
| bbl/d.....     | Barrel(s) per day                           |
| B.F.....       | Broken Front                                |
| B.F.E.D.....   | Broken Front Eastern Division               |
| con.....       | Concession                                  |
| c/l.....       | Centre line of lot                          |
| D.F.....       | Derrick Floor                               |
| E.D.....       | Eastern Division                            |
| E.F.C.....     | East of Fairchild Creek                     |
| F.C.E.M.M..... | Front Concession East of the Mohawk Mission |
| F.C.....       | Front Concession                            |
| I.R.....       | Indian Reserve                              |
| K.B.....       | Kelly Bushing                               |
| L.E.....       | Lake Erie                                   |
| Mcf/d.....     | Thousand cubic feet per day                 |
| N.E.R.....     | North of the Egremont Road                  |
| N.M.R.....     | North of the Middle Road                    |
| N.R.....       | Not recorded                                |
| N.T.R.....     | North of the Talbot Road                    |
| P.B.....       | Plugged back                                |
| psig.....      | Pounds per square inch gauge                |
| R.R.....       | Railroad                                    |
| S.E.R.....     | South of Egremont Road                      |
| S.L.R.....     | South of Longwood Road                      |
| S.M.R.....     | South of the Middle Road                    |
| S.T.R.....     | South of Talbot Road                        |
| S.W.....       | Source Well                                 |
| T.D.....       | Total Depth                                 |
| tp.....        | Township                                    |
| W.D.....       | Western Division                            |
| W.D.F.C.....   | Western Division of Front Concession        |
| WHP.....       | Well head pressure                          |

## WEST POINT SYNDICATE No. 1

Brantford tp., lot 21, con. I.

Co-ordinates: 510' S., 100' E.  
 Elevation: 828' + 3'.  
 Driller: P. L. Jackson Co.  
 Completed: June 15, 1963.  
 Result: Abandoned.

| Formation            | Top    | Thickness |
|----------------------|--------|-----------|
| Drift.....           | 3      | 168       |
| Salina.....          | 171    | 51        |
| Top of A2—171        |        |           |
| Guelph-Lockport..... | 222    | 270       |
| Rochester.....       | 492    | 41        |
| Irondequoit.....     | 533    | 5         |
| Reynales.....        | 538    | 6         |
| Cabot Head.....      | 544    | 72        |
| Manitoulin.....      | 616    | 19        |
| Whirlpool.....       | 635    | 2         |
| Queenston.....       | 637    | 505       |
| Meaford-Dundas.....  | 1,142  | 683       |
| Collingwood.....     | 1,825  | 122       |
| Cobourg.....         | 1,947  | 195       |
| Sherman Fall.....    | 2,142  | 141       |
| Kirkfield.....       | 2,283  | 152       |
| Gull River.....      | 2,435  | 197       |
| Shadow Lake.....     | 2,632  | 8         |
| Precambrian.....     | 2,640  | 50        |
| Total Depth.....     | 2,690' |           |

Geologist: W. E. Koepke.

Water Oil  
 Fresh at 180'. Show at 2,330'.

## H. L. BROCKMAN-CHANT No. 1

Burford tp., lot 15, con. VI.

Co-ordinates: 2,775' N., 721' E.  
 Elevation: 849' + 4'.  
 Driller: Mandley Drilling Contractors, Ltd.  
 Completed: September 6, 1963.  
 Result: Abandoned.

| Formation            | Top    | Thickness |
|----------------------|--------|-----------|
| Drift.....           | 4      | 91        |
| Salina.....          | 95     | 270       |
| Top of A2—303        |        |           |
| Guelph-Lockport..... | 365    | 364       |
| Rochester.....       | 729    | 55        |
| Irondequoit.....     | 784    | 8         |
| Reynales.....        | 792    | 5         |
| Cabot Head.....      | 797    | 59        |
| Manitoulin.....      | 856    | 27        |
| Whirlpool.....       | 883    | 2         |
| Queenston.....       | 885    | 535       |
| Meaford-Dundas.....  | 1,420  | 600       |
| Collingwood.....     | 2,020  | 138       |
| Cobourg.....         | 2,158  | 194       |
| Sherman Fall.....    | 2,352  | 122       |
| Kirkfield.....       | 2,474  | 171       |
| Gull River.....      | 2,645  | 231       |
| Shadow Lake.....     | 2,876  | 4         |
| Eau Claire.....      | 2,880  | 13        |
| Precambrian.....     | 2,893  | 6         |
| Total Depth.....     | 2,899' |           |

Geologist: W. E. Koepke.

Water Gas Oil  
 Fresh at 95'. Show at 2,178'. Show at 2,889' to  
 Slightly Sulphur at 318'. 2,892'.  
 Salt at 2,790'.

## B. B. FEINBERG-ALLGOOD No. 1

Burford tp., lot 7, con. IX.

Co-ordinates: 600' N., 500' W.  
 Elevation: 827' + 3'.  
 Driller: S. Earl.  
 Completed: September 14, 1963.  
 Result: Abandoned.

| Formation            | Top    | Thickness |
|----------------------|--------|-----------|
| Drift.....           | 3      | 93        |
| Salina.....          | 96     | 256       |
| Top of A2—298        |        |           |
| Guelph-Lockport..... | 352    | 348       |
| Rochester.....       | 700    | 48        |
| Irondequoit.....     | 748    | 6         |
| Reynales.....        | 754    | 2         |
| Thorold.....         | 756    | 4         |
| Cabot Head.....      | 760    | 68        |
| Manitoulin.....      | 828    | 23        |
| Whirlpool.....       | 851    | 4         |
| Queenston.....       | 855    | 520       |
| Meaford-Dundas.....  | 1,375  | 680       |
| Collingwood.....     | 2,055  | 133       |
| Cobourg.....         | 2,188  | 142       |
| Sherman Fall.....    | 2,330  | 170       |
| Kirkfield.....       | 2,500  | 157       |
| Gull River.....      | 2,657  | 233       |
| Shadow Lake.....     | 2,890  | 4         |
| Cambrian.....        | 2,894  | 11        |
| Precambrian.....     | 2,905  | 4         |
| Total Depth.....     | 2,909' |           |

Geologist: W. E. Koepke.

Water  
 Fresh at 35' and 104'.  
 Sulphur at 331'.

## IMPERIAL BURFORD 7-12-III (864)

Burford tp., lot 12, con. III.

Co-ordinates: 582' N., 1,248' W.  
 Elevation: 855' + 4'.  
 Driller: Chevalier & Tremblay.  
 Completed: December 20, 1963.  
 Result: Abandoned.

| Formation            | Top    | Thickness |
|----------------------|--------|-----------|
| Drift.....           | 4      | 112       |
| Salina.....          | 116    | 206       |
| Top of A2—252        |        |           |
| Guelph-Lockport..... | 322    | 370       |
| Rochester.....       | 692    | 53        |
| Irondequoit.....     | 745    | 7         |
| Reynales.....        | 752    | 12        |
| Cabot Head.....      | 764    | 56        |
| Manitoulin.....      | 820    | 30        |
| Queenston.....       | 850    | 580       |
| Meaford-Dundas.....  | 1,430  | 556       |
| Collingwood.....     | 1,986  | 148       |
| Cobourg.....         | 2,134  | 198       |
| Sherman Fall.....    | 2,332  | 118       |
| Kirkfield.....       | 2,450  | 165       |
| Gull River.....      | 2,615  | 227       |
| Shadow Lake.....     | 2,842  | 3         |
| Eau Claire.....      | 2,845  | 8         |
| Precambrian.....     | 2,853  | 21        |
| Total Depth.....     | 2,874' |           |

Geologist: W. E. Koepke.

Water Gas  
 Fresh at 100' and 120'. Show at 300' to 336'  
 Sulphur at 165' and 324'. and 744' to 762'.



KEWANEE McMASTER-GOBLES No. 22

Burford tp., lot 17, con. I.

Co-ordinates: 1,744' N., 500' W.  
Elevation: 893' + 3'.  
Driller: McMaster Drilling Co., Ltd.  
Completed: October 25, 1963.  
Result: Oil Producer.  
Reported Flow: 30 bbl/d.

| Formation                         | Top    | Thickness |
|-----------------------------------|--------|-----------|
| Drift.....                        | 3      | 155       |
| Salina.....                       | 158    | 202       |
| Top of A2—302                     |        |           |
| Guelph-Lockport.....              | 360    | 375       |
| Rochester.....                    | 735    | 47        |
| Irondequoit.....                  | 782    | 10        |
| Reynales.....                     | 792    | 10        |
| Cabot Head.....                   | 802    | 56        |
| Manitoulin.....                   | 858    | 22        |
| Queenston.....                    | 880    | 584       |
| Meaford-Dundas and Collingwood... | 1,464  | 666       |
| Cobourg.....                      | 2,130  | 165       |
| Sherman Fall.....                 | 2,295  | 172       |
| Kirkfield.....                    | 2,467  | 151       |
| Gull River.....                   | 2,618  | 236       |
| Shadow Lake.....                  | 2,854  | 4         |
| Eau Claire.....                   | 2,858  | 15        |
| Precambrian.....                  | 2,873  | 4         |
| Total Depth:.....                 | 2,877' |           |

Geologist: W. E. Koepke.

Water Oil  
Fresh at 85' and 195'. At 2,860' to 2,874'.

R. McMASTER No. 30-GOBLES No. 19

Burford tp., lot 18, con. I.

Co-ordinates: 1,677' S., 500' E.  
Elevation: 912' + 2'.  
Driller: R. McMaster & Sons Co., Ltd.  
Completed: May 11, 1963.  
Result: Oil Producer.  
Reported Flow: 15 bbl/d.

| Formation            | Top    | Thickness |
|----------------------|--------|-----------|
| Drift.....           | 2      | 168       |
| Salina.....          | 170    | 222       |
| Top of A2—335        |        |           |
| Guelph-Lockport..... | 392    | 346       |
| Rochester.....       | 738    | 64        |
| Irondequoit.....     | 802    | 7         |
| Reynales.....        | 809    | 11        |
| Cabot Head.....      | 820    | 58        |
| Manitoulin.....      | 878    | 18        |
| Whirlpool.....       | 896    | 8         |
| Queenston.....       | 904    | 483       |
| Meaford-Dundas.....  | 1,387  | 633       |
| Collingwood.....     | 2,020  | 115       |
| Cobourg.....         | 2,135  | 205       |
| Sherman Fall.....    | 2,340  | 142       |
| Kirkfield.....       | 2,482  | 158       |
| Gull River.....      | 2,640  | 233       |
| Shadow Lake.....     | 2,873  | 12        |
| Eau Claire.....      | 2,885  | 10        |
| Total Depth:.....    | 2,895' |           |

Geologist: W. E. Koepke.

Water Oil  
Fresh at 30', 185' and 225'. At 2,878' to 2,894'.

KEWANEE McMASTER-GOBLES No. 23

Burford tp., lot 18, con. I.

Co-ordinates: 1,750' N., 500' W.  
Elevation:  
Driller: McMaster Drilling Co., Ltd.  
Completed: December 17, 1963.  
Result: Oil Producer.  
Reported Flow: 50 bbl/d.

| Formation                         | Top    | Thickness |
|-----------------------------------|--------|-----------|
| Drift.....                        | 0      | 155       |
| Salina.....                       | 155    | 229       |
| Top of A2—328                     |        |           |
| Guelph-Lockport.....              | 384    | 386       |
| Rochester.....                    | 770    | 44        |
| Irondequoit.....                  | 814    | 6         |
| Reynales.....                     | 820    | 10        |
| Thorold.....                      | 830    | 5         |
| Cabot Head.....                   | 835    | 40        |
| Manitoulin.....                   | 875    | 40        |
| Whirlpool.....                    | 915    | 10        |
| Queenston.....                    | 925    | 449       |
| Meaford-Dundas and Collingwood... | 1,374  | 786       |
| Cobourg.....                      | 2,160  | 205       |
| Sherman Fall.....                 | 2,365  | 125       |
| Kirkfield.....                    | 2,490  | 152       |
| Cobocomb.....                     | 2,642  | 54        |
| Gull River.....                   | 2,696  | 181       |
| Shadow Lake.....                  | 2,877  | 3         |
| Cambrian.....                     | 2,880  | 15        |
| Precambrian.....                  | 2,895  | 3         |
| Total Depth:.....                 | 2,898' |           |

Geologist: W. E. Koepke.

Water Oil  
Fresh at 110' and 190'. At 2,884' to 2,896'.

McMASTER No. 31-GOBLES No. 20

Burford tp., lot 16, con. I.

Co-ordinates: 570' N., 485' E.  
Elevation: 892' + 3'.  
Driller: R. McMaster & Sons Co., Ltd.  
Completed: June 29, 1963.  
Result: Oil Producer.  
Reported Flow: 60 bbl/d.

| Formation                         | Top    | Thickness |
|-----------------------------------|--------|-----------|
| Drift.....                        | 3      | 127       |
| Salina.....                       | 130    | 220       |
| Top of A2—292                     |        |           |
| Guelph-Lockport.....              | 350    | 378       |
| Rochester.....                    | 728    | 58        |
| Irondequoit.....                  | 786    | 8         |
| Cabot Head.....                   | 794    | 76        |
| Manitoulin.....                   | 870    | 20        |
| Queenston.....                    | 890    | 596       |
| Meaford-Dundas and Collingwood... | 1,486  | 652       |
| Cobourg.....                      | 2,138  | 162       |
| Sherman Fall.....                 | 2,300  | 176       |
| Kirkfield.....                    | 2,476  | 152       |
| Gull River.....                   | 2,628  | 232       |
| Shadow Lake.....                  | 2,860  | 2         |
| Cambrian.....                     | 2,862  | 16        |
| Precambrian.....                  | 2,878  | 4         |
| Total Depth:.....                 | 2,882' |           |

Geologist: W. E. Koepke.

Water Oil  
Fresh at 112' and 185'. At 2,862' to 2,878'.

## McMASTER ET AL-GOBLES No. 21

Burford tp., lot 17, con. II.

Co-ordinates: 606' S., 513' W.  
 Elevation: 892' + 3'.  
 Driller: R. McMaster & Sons Co., Ltd.  
 Completed: September 12, 1963.  
 Result: Oil Producer.  
 Reported Flow: 30 bbl/d.

| Formation            | Top    | Thickness |
|----------------------|--------|-----------|
| Drift.....           | 3      | 136       |
| Salina.....          | 139    | 211       |
| Top of A2—288        |        |           |
| Guelph-Lockport..... | 350    | 380       |
| Rochester.....       | 730    | 48        |
| Irondequoit.....     | 778    | 10        |
| Reynales.....        | 788    | 8         |
| Cabot Head.....      | 796    | 56        |
| Manitoulin.....      | 852    | 28        |
| Queenston.....       | 880    | 604       |
| Meaford-Dundas.....  | 1,484  | 506       |
| Collingwood.....     | 1,990  | 142       |
| Cobourg.....         | 2,132  | 105       |
| Sherman Fall.....    | 2,337  | 131       |
| Kirkfield.....       | 2,468  | 152       |
| Gull River.....      | 2,620  | 236       |
| Shadow Lake.....     | 2,856  | 4         |
| Eau Claire.....      | 2,860  | 18        |
| Precambrian.....     | 2,878  | 6         |
| Total Depth:.....    | 2,884' |           |

Geologist: W. E. Koepke.

Water Oil  
 Fresh at 130' and 150'. At 2,863' to 2,878'.

## CANADIAN DELHI No. 23

Onondaga tp., lot 55, con. Front Con. E.M.M.

Co-ordinates: 2,900' N. of Hwy. 54, 300' E.  
 Elevation: 654' + 3'.  
 Driller: Chevalier & Tremblay.  
 Completed: May 25, 1963.  
 Result: Abandoned.

| Formation            | Top    | Thickness |
|----------------------|--------|-----------|
| Drift.....           | 3      | 75        |
| Salina.....          | 78     | 18        |
| Top of A2—83         |        |           |
| Guelph-Lockport..... | 96     | 244       |
| Rochester.....       | 340    | 45        |
| Irondequoit.....     | 385    | 7         |
| Reynales.....        | 392    | 10        |
| Thorold.....         | 402    | 10        |
| Grimsby.....         | 412    | 8         |
| Cabot Head.....      | 420    | 52        |
| Manitoulin.....      | 472    | 18        |
| Whirlpool.....       | 490    | 10        |
| Queenston.....       | 500    | 610       |
| Meaford-Dundas.....  | 1,110  | 705       |
| Collingwood.....     | 1,815  | 127       |
| Cobourg.....         | 1,942  | 172       |
| Sherman Fall.....    | 2,114  | 130       |
| Kirkfield.....       | 2,244  | 158       |
| Gull River.....      | 2,402  | 216       |
| Shadow Lake.....     | 2,618  | 6         |
| Eau Claire.....      | 2,624  | 34        |
| Precambrian.....     | 2,658  | 2         |
| Total Depth:.....    | 2,660' |           |

Geologist: W. E. Koepke.

Water Oil  
 Fresh at 70' and 95'. Show at 2,630' and 2,632'.

## HELEN H. HOWELL No. 1

Onondaga tp., lot 16, con. E.F.C.

Co-ordinates: 450' S. of Rd., 400' E. of Fairchild Creek.  
 Elevation:  
 Driller: D. Thomson.  
 Completed: December 7, 1963.  
 Result: Gas Producer.  
 Reported Flow: 25 Mcf/d. WHP. 130 psig.

| Formation            | Top  | Thickness |
|----------------------|------|-----------|
| Drift.....           | 0    | 71        |
| Guelph-Lockport..... | 71   | 253       |
| Rochester.....       | 324  | 50        |
| Irondequoit.....     | 374  | 8         |
| Reynales.....        | 382  | 4         |
| Thorold.....         | 386  | 8         |
| Cabot Head.....      | 394  | 70        |
| Manitoulin.....      | 464  | 10        |
| Whirlpool.....       | 474  | 12        |
| Queenston.....       | 486  | 26        |
| Total Depth:.....    | 512' |           |

Geologist: W. E. Koepke.

Water Gas  
 Fresh at 80'. Show at 390' and 467' to 487'.

## McMASTER No. 10-STEWART No. 3

Onondaga tp., lot 7, con. III.

Co-ordinates: 1,000' S., 150' E.  
 Elevation: 674' + 4'.  
 Driller: W. R. McMaster & Sons Co., Ltd.  
 Completed: May 10, 1963.  
 Result: Abandoned.

| Formation                           | Top    | Thickness |
|-------------------------------------|--------|-----------|
| Drift.....                          | 4      | 79        |
| Guelph-Lockport.....                | 83     | 262       |
| Rochester.....                      | 345    | 42        |
| Clinton.....                        | 387    | 28        |
| Grimsby.....                        | 415    | 20        |
| Manitoulin.....                     | 435    | 63        |
| Whirlpool.....                      | 498    | 4         |
| Queenston.....                      | 502    | 684       |
| Meaford-Dundas.....                 | 1,186  | 631       |
| Collingwood.....                    | 1,817  | 109       |
| Cobourg.....                        | 1,926  | 164       |
| Sherman Fall.....                   | 2,090  | 140       |
| Kirkfield.....                      | 2,230  | 157       |
| Gull River.....                     | 2,387  | 205       |
| Shadow Lake.....                    | 2,592  | 10        |
| Cambrian.....                       | 2,602  | 32        |
| Precambrian.....                    | 2,634  | 37        |
| Total Depth:.....                   | 2,671' |           |
| N.B.                                |        |           |
| Previously drilled (Nov. 29, 1956). | 4      | 555       |
| Deepening (May 10, 1963).           | 555    | 2,116     |

Geologist: W. E. Koepke.

Water Gas Oil  
 Fresh at 116'. Show at 516'. Show at 516' to 518' and 2,605' to 2,631'.

ALLEGANY No. 85—DURIANCIK No. 1  
Aldbrough tp., lot A, con. XII.

Co-ordinates: 1,003' S. of c/l. 505' E. of Rd.  
Elevation: 649' + 4'.  
Driller: H. Meier.  
Completed: May 6, 1963.  
Result: Abandoned.

| Formation                  | Top                     | Thickness |
|----------------------------|-------------------------|-----------|
| Drift.....                 | 4                       | 182       |
| Hamilton.....              | 186                     | 229       |
| Delaware.....              | 415                     | 169       |
| Columbus.....              | 584                     | 52        |
| Detroit River.....         | 636                     | 100       |
| Bois Blanc.....            | 736                     | 186       |
| Oriskany.....              | 922                     | 36        |
| Bass Island.....           | 958                     | 165       |
| Salina.....                | 1,123                   | 512       |
| Top of A2—1,512            |                         |           |
| Top of A1—1,604            |                         |           |
| Guelph-Lockport.....       | 1,635                   | 272       |
| Rochester.....             | 1,907                   | 43        |
| Reynales.....              | 1,950                   | 2         |
| Cabot Head.....            | 1,952                   | 120       |
| Manitoulin.....            | 2,072                   | 33        |
| Queenston.....             | 2,105                   | 400       |
| Meaford-Dundas.....        | 2,505                   | 470       |
| Collingwood.....           | 2,975                   | 135       |
| Cobourg.....               | 3,110                   | 120       |
| Sherman Fall.....          | 3,230                   | 120       |
| Kirkfield.....             | 3,350                   | 203       |
| Coboconk.....              | 3,553                   | 79        |
| Gull River.....            | 3,632                   | 332       |
| Shadow Lake.....           | 3,964                   | 5         |
| Cambrian.....              | 3,969                   | 9         |
| Trempealeau.....           | 3,978                   | 15        |
| Total Depth:.....          | 3,993'                  |           |
| Geologist: W. E. Koepke.   |                         |           |
| Water                      | Gas                     |           |
| Fresh at 195'.             | Show at 3,968' to 3970' |           |
| Sulphur at 572' and 920'.  | and 3,989' to 3,991'.   |           |
| Salt at 1,667' and 3,991'. |                         |           |

CANADA-CITIES SERVICE No. 11  
Aldbrough tp., lot 5, con. V.

Co-ordinates: 450' S., 200' W.  
Elevation: 661' + 1'.  
Driller: S. Earl.  
Completed: September 19, 1963.  
Result: Water Injection Well.

| Formation                | Top                   | Thickness |
|--------------------------|-----------------------|-----------|
| Drift.....               | 1                     | 223       |
| Dundee.....              | 224                   | 113       |
| Columbus.....            | 337                   | 22        |
| Detroit River.....       | 359                   | 4         |
| Total Depth:.....        | 363'                  |           |
| Geologist: W. E. Koepke. |                       |           |
| Water                    | Oil                   |           |
| Fresh at 163'.           | Show at 338' to 358'. |           |

CANADA-CITIES SERVICE No. 12  
Aldbrough tp., lot 5, con. VI.

Co-ordinates: 1,720' S., 750' W.  
Elevation: 698' + 1'.  
Driller: Sydney Earl.  
Completed: November 27, 1963.  
Result: Water Injection Well.

| Formation                | Top                   | Thickness |
|--------------------------|-----------------------|-----------|
| Drift.....               | 1                     | 249       |
| Dundee.....              | 250                   | 165       |
| Columbus.....            | 415                   | 21        |
| Total Depth:.....        | 436'                  |           |
| Geologist: W. E. Koepke. |                       |           |
| Water                    | Oil                   |           |
| Not recorded             | Show at 416' to 433'. |           |
| (Rotary Well).           |                       |           |

ELGIN PETROLEUM No. 42  
Aldbrough tp., lot 5, con. VI.

Co-ordinates: 504' S., 511' W. of c/l.  
Elevation: 693' + 1'.  
Driller: Demaray and Nichols.  
Completed: August 22, 1963.  
Result: Oil Producer.  
Reported Flow: 18 bbl/d.

| Formation                | Top              | Thickness |
|--------------------------|------------------|-----------|
| Drift.....               | 1                | 241       |
| Dundee.....              | 242              | 146       |
| Columbus.....            | 388              | 26        |
| Detroit River.....       | 414              | 2         |
| Total Depth:.....        | 416'             |           |
| Geologist: W. E. Koepke. |                  |           |
| Water                    | Oil              |           |
| Not recorded.            | At 393' to 416'. |           |

ELGIN PETROLEUM No. 43  
Aldbrough tp., lot 5, con. VI.

Co-ordinates: 1,004' S., 511' W. of c/l.  
Elevation: 691' + 1'.  
Driller: Demaray and Nichols.  
Completed: September 4, 1963.  
Result: Oil Producer.  
Reported Flow: 6 bbl/d.

| Formation                | Top              | Thickness |
|--------------------------|------------------|-----------|
| Drift.....               | 1                | 241       |
| Dundee.....              | 242              | 193       |
| Columbus.....            | 385              | 34        |
| Total Depth:.....        | 419'             |           |
| Geologist: W. E. Koepke. |                  |           |
| Water                    | Oil              |           |
| Not recorded.            | At 396' to 419'. |           |

ELGIN PETROLEUM No. 44  
Aldbrough tp., lot 4, con. VI.

Co-ordinates: 375' S., 321' E.  
Elevation: 693' + 1'.  
Driller: Demaray and Nichols.  
Completed: September 20, 1963.  
Result: Water Injection Well.

| Formation                | Top  | Thickness |
|--------------------------|------|-----------|
| Drift.....               | 1    | 259       |
| Dundee.....              | 260  | 158       |
| Columbus.....            | 418  | 17        |
| Total Depth:.....        | 435' |           |
| Geologist: W. E. Koepke. |      |           |
| Water                    |      |           |
| Fresh at 232'.           |      |           |
| Salt at 433'.            |      |           |

ELGIN PETROLEUM No. 45  
Aldbrough tp., lot 4, con. VI.

Co-ordinates: 1,255' S., 785' E.  
Elevation: 693' + 1'.  
Driller: Demaray and Nichols.  
Completed: October 3, 1963.  
Result: Oil Producer.  
Reported Flow: 20 bbl./d.

| Formation                | Top           | Thickness        |
|--------------------------|---------------|------------------|
| Drift.....               | 1             | 258              |
| Dundee.....              | 259           | 148              |
| Columbus.....            | 407           | 22               |
| Total Depth:.....        | 429'          |                  |
| Geologist: W. E. Koepke. |               |                  |
| Water                    | Gas           | Oil              |
| Fresh at 230'.           | Show at 215'. | At 417' to 418'. |

## ELGIN PETROLEUM No. 46

Aldborough tp., lot 4, con. VI.

Co-ordinates: 1,553' S., 754' W.  
 Elevation: 693' + 1'.  
 Driller: Demaray and Nichols.  
 Completed: November 9, 1963.  
 Result: Oil Producer.  
 Reported Flow: 25 bbl/d.

| Formation         | Top  | Thickness |
|-------------------|------|-----------|
| Drift.....        | 1    | 256       |
| Dundee.....       | 257  | 159       |
| Columbus.....     | 416  | 11        |
| Total Depth:..... | 427' |           |

Geologist: W. E. Koepke.

Water Oil  
 Fresh at 227'. At 414' to 437'.

## E. ENGLISH No. 1-McLEAN No. 1A

(C. B. Lewis No. 17—Deepening)

Aldborough tp., lot 5, con. XII.

Co-ordinates: 1,300' N. of Hwy. No. 3, 760' E.  
 Elevation: 654' + 2'.  
 Driller: E. English Drilling Co.  
 Completed: October 16, 1963.  
 Result: Suspended.

Previously drilled by C. B. Lewis in year 1960 to a total depth of 2,450'. See Gas and Oil Well logs — 1960.

| Formation                     | Top    | Thickness |
|-------------------------------|--------|-----------|
| Queenston (Drilled 1960)..... | 2,074  | 377       |
| Queenston.....                | —      | 19        |
| Meaford-Dundas.....           | 2,470  | 605       |
| Cobourg.....                  | 3,075  | 105       |
| Sherman Fall.....             | 3,180  | 138       |
| Kirkfield.....                | 3,318  | 192       |
| Cobocok.....                  | 3,510  | 75        |
| Gull River.....               | 3,585  | 365       |
| Shadow Lake.....              | 3,950  | 8         |
| Cambrian.....                 | 3,958  | 12        |
| Total Depth:.....             | 3,970' |           |

Geologist: W. E. Koepke.

Water  
 Salt at 3,968'.

## FLASHER OIL &amp; GAS No. 1

Aldborough tp., lot 22, con. B-B.F.E.D.

Co-ordinates: 1605' N., 243' E.  
 Elevation: 695' + 4'.  
 Driller: E. English Drilling Co.  
 Completed: August 22, 1963.  
 Result: Gas Producer.  
 Reported Flow: 70 Mcf/d. WHP. 600 psig.

| Formation          | Top   | Thickness |
|--------------------|-------|-----------|
| Drift.....         | 4     | 254       |
| Hamilton.....      | 258   | 82        |
| Dundee.....        | 340   | 165       |
| Columbus.....      | 505   | 10        |
| Detroit River..... | 515   | 205       |
| Bois Blanc.....    | 720   | 208       |
| Bass Island.....   | 928   | 162       |
| Salina.....        | 1,090 | 389       |

Top of A2—1,350

Top of A1—1,455

Total Depth:..... 1,479'.

Geologist: W. E. Koepke.

Water Gas Oil  
 Sulphur at 660' At 1,390' to 1,430'. Show at 1,390' to 1,430'.

## ELGIN PETROLEUM No. 47

Aldborough tp., lot 4, con. VI.

Co-ordinates: 1,555' S., 1,154' W.  
 Elevation: 694' + 1'.  
 Driller: Demaray and Nichols.  
 Completed: November 28, 1963.  
 Result: Water Injection Well.

| Formation         | Top  | Thickness |
|-------------------|------|-----------|
| Drift.....        | 1    | 264       |
| Dundee.....       | 265  | 165       |
| Columbus.....     | 430  | 13        |
| Total Depth:..... | 443' |           |

Geologist: W. E. Koepke.

Water  
 Fresh at 230'.

## IMPERIAL No. 847

Aldborough tp., lot 11, con. V.

Co-ordinates: 1,522' N., 495' W.  
 Elevation: 695' + 4'.  
 Driller: Stubble and Stubble, Ltd.  
 Completed: June 28, 1963.  
 Result: Abandoned.  
 Reported Flow: 250 Mcf/d. WHP N.R. psig.

| Formation          | Top   | Thickness |
|--------------------|-------|-----------|
| Drift.....         | 4     | 249       |
| Hamilton.....      | 253   | 67        |
| Delaware.....      | 320   | 165       |
| Columbus.....      | 485   | 25        |
| Detroit River..... | 510   | 94        |
| Bois Blanc.....    | 604   | 284       |
| Oriskany.....      | 888   | 27        |
| Bass Island.....   | 915   | 155       |
| Salina.....        | 1,070 | 692       |

Top of A2—1,561

Top of A1—1,648

|                      |        |     |
|----------------------|--------|-----|
| Guelph-Lockport..... | 1,762  | 170 |
| Rochester.....       | 1,932  | 48  |
| Reynales.....        | 1,980  | 8   |
| Grimsby.....         | 1,988  | 16  |
| Cabot Head.....      | 2,004  | 86  |
| Manitoulin.....      | 2,090  | 30  |
| Queenston.....       | 2,120  | 395 |
| Meaford-Dundas.....  | 2,515  | 415 |
| Collingwood.....     | 2,930  | 124 |
| Cobourg.....         | 3,054  | 106 |
| Sherman Fall.....    | 3,160  | 154 |
| Kirkfield.....       | 3,314  | 199 |
| Cobocok.....         | 3,513  | 77  |
| Gull River.....      | 3,590  | 321 |
| Shadow Lake.....     | 3,911  | 9   |
| Cambrian.....        | 3,920  | 12  |
| Trempealeau.....     | 3,932  | 38  |
| Eau Claire.....      | 3,970  | 14  |
| Precambrian.....     | 3,984  | 9   |
| Total Depth:.....    | 3,993' |     |

Geologist: W. E. Koepke.

Water Gas Oil  
 Sulphur at 490'. Show at 3,916'. Show at 3,973'.  
 Salt at 3,928'.

NEMEC & PERE MARQUETTE No. 1  
Aldborough tp., lot 5, con. VI.

Co-ordinates: 1,375' N., 265' E. of c/l.  
Elevation: 696' + 1'.  
Driller: J. Nemec.  
Completed: May 23, 1963.  
Result: Oil Show.

| Formation         | Top   | Thickness |
|-------------------|-------|-----------|
| Drift.....        | 1     | 257       |
| Dundee.....       | 258   | 157       |
| Columbus.....     | 415   | 15        |
| Total Depth:..... | 430'. |           |

Geologist: W. E. Koepke.

|                  |                       |
|------------------|-----------------------|
| Water            | Oil                   |
| Fresh at 258'.   | Show at 426' to 428'. |
| Sulphur at 356'. |                       |

NEMEC & SCOTT No. 1  
Aldborough tp., lot 6, con. VI.

Co-ordinates: 450' S. of c/l., 765' W.  
Elevation: 695' + 1'.  
Driller: J. Nemec.  
Completed: June 26, 1963.  
Result: Abandoned.

| Formation         | Top   | Thickness |
|-------------------|-------|-----------|
| Drift.....        | 1     | 261       |
| Delaware.....     | 262   | 158       |
| Columbus.....     | 420   | 15        |
| Total Depth:..... | 435'. |           |

Geologist: W. E. Koepke.

Water  
Fresh at 232' and 260'.  
Sulphur at 431'.

UNION-MOSALD 58  
Aldborough tp., lot Z, con. A—B.F.E.D.

Co-ordinates: 1,900' S., 150' E.  
Elevation: 688' + 4'.  
Driller: H. Meier.  
Completed: July 13, 1963.  
Result: Abandoned.

| Formation          | Top     | Thickness |
|--------------------|---------|-----------|
| Drift.....         | 4       | 176       |
| Hamilton.....      | 180     | 206       |
| Dundee.....        | 386     | 138       |
| Columbus.....      | 524     | 41        |
| Detroit River..... | 565     | 110       |
| Bois Blanc.....    | 675     | 155       |
| Bass Island.....   | 830     | 96        |
| Salina.....        | 926     | 540       |
| Top of A2—1,318    |         |           |
| Top of A1—1,422    |         |           |
| Total Depth:.....  | 1,466'. |           |

Geologist: W. E. Koepke.

|                  |                          |
|------------------|--------------------------|
| Water            | Gas                      |
| Fresh at 155'.   | Show at 1,424' to 1,446' |
| Sulphur at 600'. | and 1,456' to 1,461'.    |

UNION-MOSALD 59  
Aldborough tp., lot Z, con. A—B.F.E.D.

Co-ordinates: 900' N., 725' W.  
Elevation: 687' + 4'.  
Driller: H. Meier.  
Completed: June 17, 1963.  
Result: Abandoned.

| Formation            | Top     | Thickness |
|----------------------|---------|-----------|
| Drift.....           | 4       | 202       |
| Hamilton.....        | 206     | 231       |
| Dundee.....          | 437     | 133       |
| Columbus.....        | 570     | 60        |
| Detroit River.....   | 630     | 110       |
| Bois Blanc.....      | 740     | 154       |
| Bass Island.....     | 894     | 90        |
| Salina.....          | 984     | 499       |
| Top of A2—1,316      |         |           |
| Top of A1—1,412      |         |           |
| Guelph-Lockport..... | 1,483   | 24        |
| Total Depth:.....    | 1,507'. |           |

Geologist: W. E. Koepke.

|                  |                 |
|------------------|-----------------|
| Water            | Gas             |
| Fresh at 160'.   | Show at 1,415'. |
| Sulphur at 600'. |                 |

UNION-MOSALD 61  
Aldborough tp., lot Y, con. I.E.D.

Co-ordinates: 1,225' S., 900' E.  
Elevation: 690' + 2'.  
Driller: H. W. Meier.  
Completed: July 17, 1963.  
Result: Abandoned.

| Formation          | Top     | Thickness |
|--------------------|---------|-----------|
| Drift.....         | 2       | 258       |
| Hamilton.....      | 260     | 119       |
| Dundee.....        | 379     | 141       |
| Columbus.....      | 520     | 82        |
| Detroit River..... | 602     | 102       |
| Bois Blanc.....    | 704     | 201       |
| Bass Island.....   | 905     | 95        |
| Salina.....        | 1,000   | 471       |
| Top of A2—1,332    |         |           |
| Top of A1—1,422    |         |           |
| Total Depth:.....  | 1,471'. |           |

Geologist: W. E. Koepke.

Water  
Fresh at 180'.  
Sulphur at 526' and 536'.

CENTRAL PIPE LINE-THURSTON No. 2  
Bayham tp., lot 16, con. V.

Co-ordinates: 400' N., 265' E. of Highway No. 19.  
Elevation: 750' + 2'.  
Driller: The Central Pipe Line Co., Ltd.  
Completed: March 22, 1963.  
Result: Gas Producer.  
Reported Flow: 10 Mcf/d. WHP. 120 psig.

| Formation            | Top     | Thickness |
|----------------------|---------|-----------|
| Drift.....           | 2       | 278       |
| Delaware.....        | 280     | 88        |
| Columbus.....        | 368     | 30        |
| Detroit River.....   | 398     | 100       |
| Bois Blanc.....      | 498     | 128       |
| Bass Island.....     | 626     | 52        |
| Salina.....          | 678     | 398       |
| Top of A2—1,002      |         |           |
| Top of A1—1,060      |         |           |
| Guelph-Lockport..... | 1,076   | 256       |
| Rochester.....       | 1,332   | 40        |
| Reynales.....        | 1,372   | 19        |
| Thorold.....         | 1,391   | 5         |
| Cabot Head.....      | 1,396   | 20        |
| Total Depth:.....    | 1,416'. |           |

Geologist: W. E. Koepke.

|                |                      |
|----------------|----------------------|
| Water          | Gas                  |
| Fresh at 288'. | At 1,370' to 1,403'. |

## IMPERIAL-FELMONT DUNWICH 5—VIII (852)

Dunwich tp., lot 5, con. VIII.

Co-ordinates: 1,540' S., 594' E.  
 Elevation: 691 + 3'.  
 Driller: Stubble & Stubble, Ltd.  
 Completed: August 29, 1963.  
 Result: Abandoned.

| Formation            | Top    | Thickness |
|----------------------|--------|-----------|
| Drift.....           | 3      | 317       |
| Hamilton.....        | 320    | 37        |
| Delaware.....        | 357    | 179       |
| Columbus.....        | 536    | 39        |
| Detroit River.....   | 575    | 81        |
| Bois Blanc.....      | 656    | 322       |
| Bass Island.....     | 978    | 142       |
| Salina.....          | 1,120  | 456       |
| Top of A2—1,450      |        |           |
| Top of A1—1,526      |        |           |
| Guelph-Lockport..... | 1,576  | 255       |
| Rochester.....       | 1,831  | 48        |
| Reynales.....        | 1,879  | 9         |
| Grimsby.....         | 1,888  | 27        |
| Cabot Head.....      | 1,915  | 75        |
| Manitoulin.....      | 1,990  | 25        |
| Queenston.....       | 2,015  | 465       |
| Meaford-Dundas.....  | 2,480  | 450       |
| Collingwood.....     | 2,930  | 132       |
| Cobourg.....         | 3,062  | 112       |
| Sherman Fall.....    | 3,174  | 148       |
| Kirkfield.....       | 3,322  | 190       |
| Coboconk.....        | 3,512  | 88        |
| Gull River.....      | 3,600  | 272       |
| Shadow Lake.....     | 3,872  | 6         |
| Cambrian.....        | 3,878  | 113       |
| Precambrian.....     | 3,991  | 8         |
| Total Depth.....     | 3,999' |           |

Geologist: W. E. Koepke.

| Water              | Gas             | Oil               |
|--------------------|-----------------|-------------------|
| Fresh at 160'.     | Show at 3,720'. | Show at 3,878' to |
| Sulphur at 330' to |                 | 3,884' and        |
| 395'.              |                 | 3,969' to         |
| Salt at 1,631'.    |                 | 3,974'.           |
| 3,582' and 3,740'. |                 |                   |

## UNION-MOSALD No. 60

Dunwich tp., lot 1, con. A—B.F.

Co-ordinates: 650' N., 200' E.  
 Elevation: 700' + 2'.  
 Driller: H. W. Meier.  
 Completed: June 19, 1963.  
 Result: Abandoned.

| Formation            | Top    | Thickness |
|----------------------|--------|-----------|
| Drift.....           | 2      | 298       |
| Hamilton.....        | 300    | 124       |
| Delaware.....        | 424    | 138       |
| Columbus.....        | 562    | 48        |
| Detroit River.....   | 610    | 120       |
| Bois Blanc.....      | 730    | 180       |
| Bass Island.....     | 910    | 92        |
| Salina.....          | 1,002  | 480       |
| Top of A2—1,332      |        |           |
| Top of A1—1,420      |        |           |
| Guelph-Lockport..... | 1,482  | 22        |
| Total Depth.....     | 1,504' |           |

Geologist: W. E. Koepke.

| Water            | Gas                      | Oil               |
|------------------|--------------------------|-------------------|
| Fresh at 245'.   | Show at 1,334' to 1,336' | Show at 1,405' to |
| Sulphur at 609'. | and 1,428 to 1,442'.     | 1,410'.           |

## IMPERIAL DUNWICH 23-A (857)

Dunwich tp., lot 23, con. A.

Co-ordinates: 1,150' N., 990' W.  
 Elevation: 759' + 4'.  
 Driller: Chevalier & Tremblay Drilling Co., Ltd.  
 Completed: October 29, 1963.  
 Result: Abandoned.

| Formation            | Top    | Thickness |
|----------------------|--------|-----------|
| Drift.....           | 4      | 300       |
| Dundee.....          | 304    | 122       |
| Detroit River.....   | 426    | 159       |
| Bois Blanc.....      | 585    | 257       |
| Bass Island.....     | 842    | 98        |
| Salina.....          | 940    | 436       |
| Top of A2—1,267      |        |           |
| Top of A1—1,338      |        |           |
| Guelph-Lockport..... | 1,376  | 272       |
| Rochester.....       | 1,648  | 40        |
| Reynales.....        | 1,688  | 16        |
| Grimsby.....         | 1,704  | 8         |
| Cabot Head.....      | 1,712  | 63        |
| Manitoulin.....      | 1,775  | 51        |
| Queenston.....       | 1,826  | 470       |
| Meaford-Dundas.....  | 2,296  | 454       |
| Collingwood.....     | 2,750  | 121       |
| Cobourg.....         | 2,871  | 117       |
| Sherman Fall.....    | 2,988  | 157       |
| Kirkfield.....       | 3,145  | 179       |
| Coboconk.....        | 3,324  | 86        |
| Gull River.....      | 3,410  | 280       |
| Shadow Lake.....     | 3,690  | 4         |
| Trempealeau.....     | 3,694  | 24        |
| Eau Claire.....      | 3,718  | 61        |
| Precambrian.....     | 3,779  | 9         |
| Total Depth.....     | 3,788' |           |

Geologist: W. E. Koepke.

| Water                      | Gas                      | Oil |
|----------------------------|--------------------------|-----|
| Fresh at 180' and 312'.    | Show at 1,700' to 1,710' |     |
| Sulphur at 843'.           | and 3,701' to 3,704'.    |     |
| Salt at 1,403' and 3,701'. |                          |     |

## UNION-MOSALD No. 62

Dunwich tp., lot 3, con. II.

Co-ordinates: 1,150' S., 485' W.  
 Elevation: 694' + 2'.  
 Driller: H. W. Meier.  
 Completed: August 22nd, 1963.  
 Result: Abandoned.  
 Reported Flow: 285 Mcf/d. WHP. N.R. psig.

| Formation          | Top    | Thickness |
|--------------------|--------|-----------|
| Drift.....         | 2      | 267       |
| Hamilton.....      | 269    | 69        |
| Delaware.....      | 338    | 142       |
| Columbus.....      | 480    | 68        |
| Detroit River..... | 548    | 100       |
| Bois Blanc.....    | 648    | 232       |
| Bass Island.....   | 880    | 96        |
| Salina.....        | 976    | 476       |
| Top of A2—1,308    |        |           |
| Top of A1—1,405    |        |           |
| Total Depth.....   | 1,452' |           |

Geologist: W. E. Koepke.

| Water            | Gas                  | Oil               |
|------------------|----------------------|-------------------|
| Fresh at 216'.   | Show at 1,405' to    | Show at 1,405' to |
| Sulphur at 483'. | 1,410', 1415'.       | 1,410'.           |
| Salt at 1,419'.  | At 1,429' to 1,434'. | and 1,452'.       |

UNION-MOSALD No. 63  
Dunwich tp., lot 2, con. II.

Co-ordinates: 1,950' S., 925' E.  
Elevation: 692' + 2'.  
Driller: H. W. Meier.  
Completed: November 6, 1963.  
Result: Abandoned.  
Reported Flow: 36.8 Mcf/d. WHP. 464 psig.

| Formation          | Top | Thickness |
|--------------------|-----|-----------|
| Drift.....         | 2   | 298       |
| Hamilton.....      | 300 | 49        |
| Dundee.....        | 349 | 118       |
| Columbus.....      | 467 | 123       |
| Detroit River..... | 590 | 65        |
| Bois Blanc.....    | 655 | 237       |
| Bass Island.....   | 892 | 104       |
| Salina.....        | 996 | 482       |

|                      |        |    |
|----------------------|--------|----|
| Top of A2 — 1,320    |        |    |
| Top of A1 — 1,416    |        |    |
| Guelph-Lockport..... | 1,478  | 22 |
| Total Depth:.....    | 1,500' |    |

Geologist: W. E. Koepke.

| Water            | Gas                |
|------------------|--------------------|
| Fresh at 200'.   | At 1,325', 1,403', |
| Sulphur at 480'. | 1,418' and 1,426'. |
| Salt at 1,484'.  |                    |

WHITE ROSE-IMPERIAL DUNWICH No. 7—VI  
Dunwich tp., lot 7, con. VI.

Co-ordinates: 640' S., 665' W.  
Elevation: 716' + 3'.  
Driller: S. Earl.  
Completed: April 13, 1963.  
Result: Gas Producer, abandoned.  
Reported Flow: 1.2 MMcf/d. WHP. 150 psig.

| Formation          | Top | Thickness |
|--------------------|-----|-----------|
| Drift.....         | 3   | 309       |
| Hamilton.....      | 312 | 78        |
| Delaware.....      | 390 | 168       |
| Columbus.....      | 558 | 77        |
| Detroit River..... | 635 | 95        |
| Bois Blanc.....    | 730 | 155       |
| Bass Island.....   | 885 | 95        |
| Salina.....        | 980 | 422       |

|                      |         |     |
|----------------------|---------|-----|
| Top of A2 — 1,315    |         |     |
| Guelph-Lockport..... | 1,402   | 298 |
| Rochester.....       | 1,700   | 46  |
| Reynales.....        | 1,746   | 14  |
| Thorold.....         | 1,760   | 12  |
| Cabot Head.....      | 1,772   | 83  |
| Manitoulin.....      | 1,855   | 35  |
| Queenston.....       | 1,890   | 471 |
| Meaford-Dundas.....  | 2,361   | 440 |
| Collingwood.....     | 2,801   | 115 |
| Cobourg.....         | 2,916   | 114 |
| Sherman Fall.....    | 3,030   | 147 |
| Kirkfield.....       | 3,177   | 205 |
| Coboconk.....        | 3,382   | 76  |
| Gull River.....      | 3,458   | 295 |
| Shadow Lake.....     | 3,753   | 7   |
| Trempealeau.....     | 3,760   | 67  |
| Precambrian.....     | 3,827   | 9   |
| Total Depth:.....    | 3,836'. |     |

Geologist: W. E. Koepke & R. G. Bryant.

| Water                             | Gas        | Oil              |
|-----------------------------------|------------|------------------|
| Fresh at 290'.                    | At 3,760'. | Show at 3,786 to |
| Sulphur at 581', 915' and 1,481'. |            | 3,836'.          |
| Salt at 3,761'.                   |            |                  |

CANADIAN DELHI No. 24  
Southwold tp., lot 19, con. IV.

Co-ordinates: 470' N., 1,000' W.  
Elevation: 739' + 3'.  
Driller: Chevalier & Tremblay.  
Completed: August 24, 1963.  
Result: Abandoned.

| Formation          | Top | Thickness |
|--------------------|-----|-----------|
| Drift.....         | 3   | 277       |
| Dundee.....        | 280 | 107       |
| Detroit River..... | 387 | 143       |
| Bois Blanc.....    | 530 | 188       |
| Bass Island.....   | 718 | 72        |
| Salina.....        | 790 | 429       |

|                      |         |     |
|----------------------|---------|-----|
| Top of A2—1,106      |         |     |
| Top of A1—1,172      |         |     |
| Guelph-Lockport..... | 1,219   | 255 |
| Rochester.....       | 1,474   | 50  |
| Reynales.....        | 1,524   | 18  |
| Cabot Head.....      | 1,542   | 41  |
| Manitoulin.....      | 1,583   | 62  |
| Queenston.....       | 1,645   | 510 |
| Meaford-Dundas.....  | 2,155   | 425 |
| Collingwood.....     | 2,580   | 131 |
| Cobourg.....         | 2,711   | 124 |
| Sherman Fall.....    | 2,835   | 150 |
| Kirkfield.....       | 2,985   | 187 |
| Coboconk.....        | 3,172   | 70  |
| Gull River.....      | 3,242   | 279 |
| Shadow Lake.....     | 3,521   | 8   |
| Cambrian.....        | 3,529   | 43  |
| Precambrian.....     | 3,572   | 4   |
| Total Depth.....     | 3,576'. |     |

Geologist: W. E. Koepke.

| Water                     | Salt at 3,535'. |
|---------------------------|-----------------|
| Sulphur at 280' and 460'. |                 |

IMPERIAL OIL ENTERPRISES YARMOUTH 16—XIV  
Yarmouth tp., lot 16, con. XIV.

Co-ordinates: 1,590' N., 694' E.  
Elevation: 813' + 4'.  
Driller: Chevalier and Tremblay.  
Completed: July 31, 1963.  
Result: Abandoned.

| Formation          | Top | Thickness |
|--------------------|-----|-----------|
| Drift.....         | 4   | 226       |
| Delaware.....      | 230 | 110       |
| Detroit River..... | 340 | 125       |
| Bois Blanc.....    | 465 | 160       |
| Bass Island.....   | 625 | 83        |
| Salina.....        | 708 | 386       |

|                      |         |     |
|----------------------|---------|-----|
| Top of A2—1,000      |         |     |
| Top of A1—1,070      |         |     |
| Guelph-Lockport..... | 1,094   | 251 |
| Rochester.....       | 1,345   | 47  |
| Irondequoit.....     | 1,392   | 10  |
| Reynales.....        | 1,402   | 10  |
| Cabot Head.....      | 1,412   | 72  |
| Manitoulin.....      | 1,484   | 28  |
| Queenston.....       | 1,512   | 498 |
| Meaford-Dundas.....  | 2,010   | 508 |
| Collingwood.....     | 2,518   | 128 |
| Cobourg.....         | 2,646   | 182 |
| Sherman Fall.....    | 2,828   | 128 |
| Kirkfield.....       | 2,956   | 148 |
| Coboconk.....        | 3,104   | 80  |
| Gull River.....      | 3,184   | 251 |
| Shadow Lake.....     | 3,435   | 5   |
| Cambrian.....        | 3,440   | 40  |
| Precambrian.....     | 3,480   | 3   |
| Total Depth:.....    | 3,483'. |     |

Geologist: W. E. Koepke.

| Water                      | Fresh at 91'. |
|----------------------------|---------------|
| Sulphur at 234' and 330'.  |               |
| Salt at 1,120' and 3,448'. |               |

IMPERIAL FINA COLCHESTER SOUTH 2-3 (851)  
Colchester South tp., lot 2, con. III.

Co-ordinates: 550' N., 860' W.  
Elevation: 627' + 4'.  
Driller: L. O. Patterson Drilling Co., Ltd.  
Completed: August 3, 1963.  
Result: Abandoned.

| Formation            | Top    | Thickness |
|----------------------|--------|-----------|
| Drift.....           | 4      | 116       |
| Detroit River.....   | 120    | 130       |
| Sylvania.....        | 250    | 30        |
| Bois Blanc.....      | 280    | 82        |
| Bass Island.....     | 362    | 223       |
| Salina.....          | 585    | 533       |
| Top of A2—979        |        |           |
| Top of A1—1,068      |        |           |
| Guelph-Lockport..... | 1,118  | 346       |
| Rochester.....       | 1,464  | 6         |
| Reynales.....        | 1,470  | 5         |
| Dyer Bay.....        | 1,475  | 3         |
| Cabot Head.....      | 1,478  | 107       |
| Manitoulin.....      | 1,585  | 45        |
| Queenston.....       | 1,630  | 274       |
| Meaford-Dundas.....  | 1,904  | 246       |
| Collingwood.....     | 2,150  | 127       |
| Cobourg.....         | 2,277  | 59        |
| Sherman Fall.....    | 2,336  | 92        |
| Total Depth.....     | 2,428' |           |

Geologist: W. E. Koepke.

Water  
Fresh at 90' and 126'.  
Salt at 1,001' and 2,418'.  
Sulphur at 1,136'.  
Oil  
Show at 2,343'.

OKO No. 16—L. E. PELEE No. 03-1  
Lake Erie.

Co-ordinates: 41° 47' 12" N., 82° 32' 20" W.  
Elevation: 572' + 11' D.F.  
Driller: Mandley Drilling Contractors, Ltd.  
Completed: August 24, 1963.  
Result: Abandoned.

| Formation          | Top | Thickness |
|--------------------|-----|-----------|
| Lake.....          | 11  | 32        |
| Drift.....         | 43  | 40        |
| Delaware.....      | 83  | 69        |
| Columbus.....      | 152 | 30        |
| Detroit River..... | 182 | 160       |
| Bass Island.....   | 342 | 162       |
| Salina.....        | 504 | 486       |

Top of A2—881

Top of A1—960

|                      |        |    |
|----------------------|--------|----|
| Guelph-Lockport..... | 990    | 31 |
| Total Depth.....     | 1,021' |    |

Geologist: W. E. Koepke.

Water  
Sulphur 87' and 428'.  
Salt at 1,010'.  
Gas  
Show at 902' to 1,010'.

CONSOLIDATED WEST PETROLEUM No. 104  
Malden tp., lot 63, con. VI.

Co-ordinates: 531' S., 1,605' E.  
Elevation: 589' + 4'.  
Driller: Mandley Drilling Contractors, Ltd.  
Completed: March 5, 1963.  
Result: Abandoned.

| Formation          | Top | Thickness |
|--------------------|-----|-----------|
| Drift.....         | 4   | 60        |
| Detroit River..... | 64  | 101       |
| Bois Blanc.....    | 165 | 102       |
| Bass Island.....   | 267 | 183       |
| Salina.....        | 450 | 542       |

Top of A2—847

Top of A1—929

|                                     |        |     |
|-------------------------------------|--------|-----|
| Guelph-Lockport.....                | 992    | 338 |
| Rochester.....                      | 1,330  | 8   |
| Reynales.....                       | 1,338  | 6   |
| Cabot Head.....                     | 1,344  | 100 |
| Manitoulin.....                     | 1,444  | 56  |
| Queenston.....                      | 1,500  | 166 |
| Meaford-Dundas and Collingwood..... | 1,666  | 475 |
| Cobourg.....                        | 2,141  | 59  |
| Sherman Fall.....                   | 2,200  | 58  |
| Kirkfield.....                      | 2,258  | 212 |
| Coboconk.....                       | 2,470  | 34  |
| Gull River.....                     | 2,504  | 79  |
| Total Depth.....                    | 2,583' |     |

Geologists: B. Sandford and W. E. Koepke.

Water  
Fresh at 80'.  
Sulphur at 269'.  
Salt at 1,055' and 2,547'.  
Oil  
Show at 2,210'.

BRITISH PETROLEUM No. 2

Gosfield South tp., lot 7, con. W.D.F.C.

Co-ordinates: 800' S., 500' W.  
Elevation: 622' + 3'.  
Driller: Demaray & Nichols.  
Completed: February 21, 1963.  
Result: Abandoned.

| Formation            | Top    | Thickness |
|----------------------|--------|-----------|
| Drift.....           | 3      | 94        |
| Detroit River.....   | 97     | 187       |
| Bois Blanc.....      | 284    | 81        |
| Bass Island.....     | 370    | 168       |
| Salina.....          | 538    | 503       |
| Top of A2—942        |        |           |
| Top of A1—1,009      |        |           |
| Guelph-Lockport..... | 1,041  | 435       |
| Rochester.....       | 1,476  | 4         |
| Reynales.....        | 1,480  | 2         |
| Dyer Bay.....        | 1,482  | 13        |
| Cabot Head.....      | 1,495  | 115       |
| Manitoulin.....      | 1,610  | 42        |
| Queenston.....       | 1,652  | 292       |
| Meaford-Dundas.....  | 1,944  | 286       |
| Collingwood.....     | 2,230  | 38        |
| Cobourg.....         | 2,368  | 58        |
| Sherman Fall.....    | 2,426  | 92        |
| Kirkfield.....       | 2,518  | 51        |
| Total Depth.....     | 2,569' |           |

Geologist: W. E. Koepke.

Water  
Fresh at 45' and 98'.  
Salt at 560', 1,060' and 2,498'.  
Gas  
Show at 975'.  
Oil  
Show at 2,414' to 2,424'.



IMPERIAL-FINA MALDEN No. 42 (832)

Malden tp., lot 42, con. IV.

Co-ordinates: 560' S., 1,620' W.  
Elevation: 605' + 4'.  
Driller: Mandley Drilling Contractors, Ltd.  
Completed: March 28, 1963.  
Result: Abandoned.

| Formation            | Top     | Thickness |
|----------------------|---------|-----------|
| Drift.....           | 4       | 43        |
| Detroit River.....   | 47      | 142       |
| Sylvania.....        | 189     | 49        |
| Bois Blanc.....      | 238     | 120       |
| Bass Island.....     | 358     | 173       |
| Top of A2—1,075      |         |           |
| Top of A1—1,178      |         |           |
| Guelph-Lockport..... | 1,222   | 328       |
| Rochester.....       | 1,550   | 13        |
| Reynales.....        | 1,563   | 4         |
| Cabot Head.....      | 1,567   | 73        |
| Manitoulin.....      | 1,640   | 69        |
| Queenston.....       | 1,709   | 265       |
| Meaford-Dundas.....  | 1,974   | 207       |
| Collingwood.....     | 2,181   | 144       |
| Cobourg.....         | 2,325   | 65        |
| Sherman Fall.....    | 2,390   | 133       |
| Kirkfield.....       | 2,523   | 141       |
| Coboconk.....        | 2,664   | 56        |
| Total Depth:.....    | 2,720'. |           |

Geologist: W. E. Koepke.

| Water                      | Gas             | Oil               |
|----------------------------|-----------------|-------------------|
| Fresh at 65'.              | Shows at 2,340' | Shows at 2,364 to |
| Sulphur at 1,086'.         | and 2,358'.     | 2,369' and 2,608  |
| Salt at 2,364' and 2,608'. |                 | 2,612'.           |

Haldimand County

MITCHELL & MITCHELL-L. E. No. 212-3

Lake Erie.

Co-ordinates: 42° 37' 26.6" N., 79° 59' 10.7" W.  
Elevation: 572' + 28' K.B.  
Driller: Northern Offshore Drilling Co., Ltd.  
Completed: June 1, 1963.  
Result: Gas Producer.  
Reported Flow: 250 Mcf/d. WHP. 558 psig.

| Formation            | Top     | Thickness |
|----------------------|---------|-----------|
| Lake.....            | 28      | 135       |
| Drift.....           | 163     | 113       |
| Bois Blanc.....      | 276     | 148       |
| Bass Island.....     | 424     | 86        |
| Salina.....          | 510     | 330       |
| Top of A2—787        |         |           |
| Guelph-Lockport..... | 840     | 273       |
| Rochester.....       | 1,113   | 62        |
| Irondequoit.....     | 1,175   | 5         |
| Thorold.....         | 1,180   | 6         |
| Grimsby.....         | 1,186   | 51        |
| Cabot Head.....      | 1,237   | 39        |
| Total Depth:.....    | 1,276'. |           |

Geologist: W. E. Koepke.

| Water            | Gas                  |
|------------------|----------------------|
| Sulphur at 420'. | At 1,200' to 1,207'. |
|                  | 1,218' to 1,227' and |
|                  | 1,236' to 1,238'.    |

MITCHELL & MITCHELL-L.E. No. 214-4

Lake Erie.

Co-ordinates: 42° 39' 37.8" N., 79° 55' 56.8" W.  
Elevation: 572' + 28' K.B.  
Driller: Northern Offshore Drilling Co., Ltd.  
Completed: May 16, 1963.  
Result: Gas Producer.  
Reported Flow: 187 Mcf/d. WHP. 385 psig.

| Formation            | Top     | Thickness |
|----------------------|---------|-----------|
| Lake.....            | 28      | 123       |
| Drift.....           | 151     | 128       |
| Bois Blanc.....      | 279     | 103       |
| Bass Island.....     | 382     | 61        |
| Salina.....          | 443     | 340       |
| Top of A2—725        |         |           |
| Guelph-Lockport..... | 783     | 253       |
| Rochester.....       | 1,036   | 66        |
| Irondequoit.....     | 1,102   | 6         |
| Reynales.....        | 1,108   | 7         |
| Thorold.....         | 1,115   | 4         |
| Grimsby.....         | 1,119   | 51        |
| Cabot Head.....      | 1,170   | 72        |
| Total Depth:.....    | 1,242'. |           |

Geologist: W. E. Koepke.

| Water            | Gas                  |
|------------------|----------------------|
| Sulphur at 320'. | At 1,117' to 1,169'. |

MITCHELL & MITCHELL-L. E. No. 218-5

Lake Erie.

Co-ordinates: 42° 38' 27" N., 79° 51' 21" W.  
Elevation: 572' + 28' K.B.  
Driller: Northern Offshore Drilling Co., Ltd.  
Completed: May 27, 1963.  
Result: Abandoned.

| Formation            | Top     | Thickness |
|----------------------|---------|-----------|
| Lake.....            | 28      | 135       |
| Drift.....           | 163     | 137       |
| Bois Blanc.....      | 300     | 167       |
| Bass Island.....     | 467     | 72        |
| Salina.....          | 539     | 344       |
| Top of A2—820        |         |           |
| Guelph-Lockport..... | 883     | 239       |
| Rochester.....       | 1,122   | 60        |
| Irondequoit.....     | 1,182   | 8         |
| Thorold.....         | 1,190   | 6         |
| Grimsby.....         | 1,196   | 29        |
| Cabot Head.....      | 1,225   | 27        |
| Total Depth:.....    | 1,252'. |           |

Geologist: W. E. Koepke.

| Water            | Gas                       |
|------------------|---------------------------|
| Sulphur at 360'. | Shows at 1,199' to 1,208' |
|                  | and 1,218' to 1,226'.     |

## MITCHELL &amp; MITCHELL-L. E. No. 208-12

Lake Erie.

Co-ordinates: 42° 42' 41.8" N., 80° 01' 17.0" W.  
 Elevation: 572' + 28' K.B.  
 Driller: Northern Offshore Drilling Co., Ltd.  
 Completed: August 20, 1963.  
 Result: Gas Producer.  
 Reported Flow: 2,900 Mcf/d. WHP, 584 psig.

| Formation        | Top | Thickness |
|------------------|-----|-----------|
| Lake.....        | 28  | 69        |
| Drift.....       | 97  | 33        |
| Bois Blanc.....  | 130 | 124       |
| Bass Island..... | 254 | 54        |
| Salina.....      | 308 | 321       |

Top of A2—573

|                      |        |     |
|----------------------|--------|-----|
| Guelph-Lockport..... | 629    | 297 |
| Rochester.....       | 926    | 52  |
| Irondequoit.....     | 978    | 8   |
| Reynales.....        | 986    | 8   |
| Thorold.....         | 994    | 6   |
| Grimsby.....         | 1,000  | 40  |
| Cabot Head.....      | 1,040  | 43  |
| Total Depth:.....    | 1,083' |     |

Geologist: W. E. Koepke.

Water

Not recorded.

Gas

At 994' to 1,040' and  
 1,047' to 1,051'.

## PLACE WALPOLE No. 6

Lake Erie.

Co-ordinates: 42° 47' 52" N., 79° 54' 18" W.  
 Elevation: 572' + 15' D.F.  
 Driller: Place Gas and Oil Co., Ltd.  
 Completed: June 24, 1963.  
 Result: Abandoned.  
 Reported Flow: 3 Mcf/d. WHP, N.R. psig.

| Formation        | Top | Thickness |
|------------------|-----|-----------|
| Lake.....        | 15  | 39        |
| Drift.....       | 54  | 10        |
| Bois Blanc.....  | 70  | 59        |
| Bass Island..... | 129 | 36        |
| Salina.....      | 165 | 345       |

|                      |      |     |
|----------------------|------|-----|
| Guelph-Lockport..... | 510  | 252 |
| Rochester.....       | 762  | 54  |
| Irondequoit.....     | 816  | 4   |
| Reynales.....        | 820  | 6   |
| Thorold.....         | 826  | 10  |
| Grimsby.....         | 836  | 40  |
| Cabot Head.....      | 876  | 54  |
| Manitoulin.....      | 930  | 15  |
| Whirlpool.....       | 945  | 10  |
| Queenston.....       | 955  | 13  |
| Total Depth:.....    | 968' |     |

Geologist: W. E. Koepke.

Water

Fresh at 70'.

Sulphur at 144'.

Gas

Shows at 839' to 846'  
 and 853' to 860'.

## MITCHELL &amp; MITCHELL-L. E. No. 202-13

Lake Erie.

Co-ordinates: 42° 41' 06.4" N., 80° 00' 43.4" W.  
 Elevation: 572' + 28' K.B.  
 Driller: Northern Offshore Drilling Co., Ltd.  
 Completed: August 27, 1963.  
 Result: Gas Producer.  
 Reported Flow: 1,147 Mcf/d. WHP, 591 psig.

| Formation        | Top | Thickness |
|------------------|-----|-----------|
| Lake.....        | 28  | 93        |
| Drift.....       | 121 | 52        |
| Bois Blanc.....  | 173 | 115       |
| Bass Island..... | 288 | 60        |
| Salina.....      | 348 | 332       |

Top of A2—624

|                      |        |     |
|----------------------|--------|-----|
| Guelph-Lockport..... | 680    | 268 |
| Rochester.....       | 948    | 67  |
| Irondequoit.....     | 1,015  | 5   |
| Reynales.....        | 1,020  | 12  |
| Thorold.....         | 1,032  | 4   |
| Grimsby.....         | 1,036  | 38  |
| Cabot Head.....      | 1,074  | 22  |
| Total Depth:.....    | 1,096' |     |

Geologist: W. E. Koepke.

Water

Not recorded.

Gas

At 1,034' to 1,036',  
 1,042' to 1,045' and  
 1,046' to 1,080'.

## PLACE WALPOLE No. 19

Lake Erie.

Co-ordinates: 42° 46' 16.4" N., 79° 57' 37.2" W.  
 Elevation: 572' + 15' D.F.  
 Driller: I. Smelser.  
 Completed: September 19, 1963.  
 Result: Gas Producer.  
 Reported Flow: 56 Mcf/d. WHP, 460 psig.

| Formation          | Top | Thickness |
|--------------------|-----|-----------|
| Lake.....          | 15  | 42        |
| Drift.....         | 57  | 6         |
| Detroit River..... | 63  | 39        |
| Bois Blanc.....    | 102 | 62        |
| Bass Island.....   | 164 | 46        |
| Salina.....        | 210 | 338       |

Top of A2—490

|                      |      |     |
|----------------------|------|-----|
| Guelph-Lockport..... | 548  | 254 |
| Rochester.....       | 802  | 64  |
| Irondequoit.....     | 866  | 4   |
| Reynales.....        | 870  | 8   |
| Thorold.....         | 878  | 10  |
| Grimsby.....         | 888  | 34  |
| Cabot Head.....      | 922  | 39  |
| Total Depth:.....    | 961' |     |

Geologist: W. E. Koepke.

Water

Fresh at 76'.

Sulphur at 133'.

Gas

At 892' to 920'.

PLACE-WALPOLE No. 29

Lake Erie.

Co-ordinates: 42° 46' 10" N., 79° 59' 06" W.  
Elevation: 572' + 15' D.F.  
Driller: I. Smelser.  
Completed: June 25, 1963.  
Result: Abandoned.  
Reported Flow: 6.8 Mcf/d. WHP. N.R. psig.

| Formation            | Top    | Thickness |
|----------------------|--------|-----------|
| Lake.....            | 15     | 41        |
| Drift.....           | 56     | 13        |
| Bois Blanc.....      | 69     | 118       |
| Bass Island.....     | 187    | 41        |
| Salina.....          | 228    | 317       |
| Top of A2—485        |        |           |
| Guelph-Lockport..... | 545    | 263       |
| Rochester.....       | 808    | 57        |
| Irondequoit.....     | 865    | 5         |
| Reynales.....        | 870    | 8         |
| Thorold.....         | 878    | 7         |
| Grimsby.....         | 885    | 47        |
| Cabot Head.....      | 932    | 53        |
| Manitoulin.....      | 985    | 15        |
| Whirlpool.....       | 1,000  | 7         |
| Queenston.....       | 1,007  | 9         |
| Total Depth:.....    | 1,016' |           |

Geologist: W. E. Koepke.

| Water            | Gas                        |
|------------------|----------------------------|
| Fresh at 65'.    | Shows at 255', 567', 880', |
| Sulphur at 255'. | and 912' to 920'.          |

PLACE WALPOLE No. 30

Lake Erie.

Co-ordinates: 42° 46' 40.8" N., 79° 54' 00.1" W.  
Elevation: 572' + 15' D.F.  
Driller: I. Smelser.  
Completed: August 3, 1963.  
Result: Abandoned.  
Reported Flow: 10 Mcf/d. WHP. N.R. psig.

| Formation            | Top   | Thickness |
|----------------------|-------|-----------|
| Lake.....            | 15    | 37        |
| Drift.....           | 52    | 1         |
| Bois Blanc.....      | 53    | 99        |
| Bass Island.....     | 152   | 33        |
| Salina.....          | 185   | 344       |
| Top of A2—475        |       |           |
| Guelph-Lockport..... | 529   | 246       |
| Rochester.....       | 775   | 73        |
| Irondequoit.....     | 848   | 7         |
| Reynales.....        | 855   | 5         |
| Thorold.....         | 860   | 10        |
| Grimsby.....         | 870   | 40        |
| Cabot Head.....      | 910   | 7         |
| Total Depth:.....    | 917'. |           |

Geologist: W. E. Koepke.

| Water            | Gas                       |
|------------------|---------------------------|
| Fresh at 76'.    | Shows at 863' to 874' and |
| Sulphur at 268'. | 903' to 917'.             |

PLACE WALPOLE No. 31

Lake Erie.

Co-ordinates: 47° 45' 54" N., 79° 58' 01" W.  
Elevation: 572' + 15' D.F.  
Driller: I. Smelser.  
Completed: July 15, 1963.  
Result: Gas Producer.  
Reported Flow: 96.6 Mcf/d. WHP. 460 psig.

| Formation            | Top   | Thickness |
|----------------------|-------|-----------|
| Lake.....            | 15    | 45        |
| Drift.....           | 60    | 27        |
| Bois Blanc.....      | 87    | 95        |
| Bass Island.....     | 182   | 48        |
| Salina.....          | 230   | 330       |
| Top of A2—505        |       |           |
| Guelph-Lockport..... | 560   | 260       |
| Rochester.....       | 820   | 60        |
| Irondequoit.....     | 880   | 7         |
| Reynales.....        | 887   | 6         |
| Thorold.....         | 893   | 7         |
| Grimsby.....         | 900   | 40        |
| Cabot Head.....      | 940   | 49        |
| Total Depth:.....    | 989'. |           |

Geologist: W. E. Koepke.

| Water            | Gas                   |
|------------------|-----------------------|
| Fresh at 101'.   | Show at 880' to 887'. |
| Sulphur at 580'. | At 919' to 947'.      |

PLACE WALPOLE No. 32

Lake Erie.

Co-ordinates: 42° 46' 20.8" N., 79° 53' 30.8" W.  
Elevation: 572' + 15' D.F.  
Driller: I. Smelser.  
Completed: August 21, 1963.  
Result: Gas Producer.  
Reported Flow: 284 Mcf/d. WHP. 510 psig.

| Formation            | Top   | Thickness |
|----------------------|-------|-----------|
| Lake.....            | 15    | 43        |
| Bois Blanc.....      | 58    | 94        |
| Bass Island.....     | 152   | 40        |
| Salina.....          | 192   | 348       |
| Top of A2—476        |       |           |
| Guelph-Lockport..... | 540   | 250       |
| Rochester.....       | 790   | 65        |
| Irondequoit.....     | 855   | 5         |
| Reynales.....        | 860   | 5         |
| Thorold.....         | 865   | 10        |
| Grimsby.....         | 875   | 47        |
| Cabot Head.....      | 922   | 20        |
| Total Depth:.....    | 942'. |           |

Geologist: W. E. Koepke.

| Water         | Gas              |
|---------------|------------------|
| Fresh at 72'. | At 899' to 916'. |

## PLACE WALPOLE No. 33

Lake Erie.

Co-ordinates: 42° 45' 51" N., 79° 54' 54" W.  
 Elevation: 572' + 15' D.F.  
 Driller: Place Gas & Oil Co., Ltd.  
 Completed: June 6, 1963.  
 Result: Abandoned.

| Formation        | Top | Thickness |
|------------------|-----|-----------|
| Lake.....        | 15  | 37        |
| Drift.....       | 52  | 4         |
| Bois Blanc.....  | 56  | 131       |
| Bass Island..... | 187 | 51        |
| Salina.....      | 238 | 322       |

Top of A2—500

|                      |       |     |
|----------------------|-------|-----|
| Guelph-Lockport..... | 500   | 258 |
| Rochester.....       | 818   | 64  |
| Irondequoit.....     | 882   | 5   |
| Reynales.....        | 887   | 9   |
| Thorold.....         | 896   | 9   |
| Grimsby.....         | 905   | 39  |
| Cabot Head.....      | 944   | 59  |
| Manitoulin.....      | 1,003 | 9   |
| Whirlpool.....       | 1,012 | 9   |
| Queenston.....       | 1,021 | 4   |

Total Depth:..... 1,025'.

Geologist: W. E. Koepke.

Water

Fresh at 74'.  
 Sulphur at 132' and 575'.

## PLACE WALPOLE No. 38

Lake Erie.

Co-ordinates: 42° 46' 08" N., 79° 53' 23" W.  
 Elevation: 572' + 15' D.F.  
 Driller: I. Smelser.  
 Completed: June 4, 1964.  
 Result: Gas Producer.  
 Reported Flow: 307 Mcf/d. WHP. 480 psig.

| Formation        | Top | Thickness |
|------------------|-----|-----------|
| Lake.....        | 15  | 41        |
| Drift.....       | 56  | 4         |
| Bois Blanc.....  | 60  | 87        |
| Bass Island..... | 147 | 51        |
| Salina.....      | 198 | 335       |

Top of A2—451

|                      |     |     |
|----------------------|-----|-----|
| Guelph-Lockport..... | 533 | 271 |
| Rochester.....       | 804 | 55  |
| Irondequoit.....     | 859 | 7   |
| Reynales.....        | 866 | 10  |
| Thorold.....         | 876 | 9   |
| Grimsby.....         | 885 | 40  |
| Cabot Head.....      | 925 | 23  |

Total Depth:..... 948'.

Geologist: W. E. Koepke.

Water

Gas

Fresh at 63'.

At 881' to 928'.

## PLACE WALPOLE No. 34

Lake Erie.

Co-ordinates: 42° 46' 42.3" N., 79° 58' 09.6" W.  
 Elevation: 572' + 15' D.F.  
 Driller: Place Gas & Oil Co., Ltd.  
 Completed: September 24, 1963.  
 Result: Gas Producer.  
 Reported Flow: 96.6 Mcf/d. WHP. 465 psig.

| Formation        | Top | Thickness |
|------------------|-----|-----------|
| Lake.....        | 15  | 25        |
| Drift.....       | 40  | 1         |
| Dundee.....      | 41  | 39        |
| Bois Blanc.....  | 80  | 85        |
| Bass Island..... | 165 | 40        |
| Salina.....      | 205 | 335       |

Top of A2—478

|                      |     |     |
|----------------------|-----|-----|
| Guelph-Lockport..... | 540 | 250 |
| Rochester.....       | 790 | 58  |
| Irondequoit.....     | 848 | 5   |
| Reynales.....        | 853 | 7   |
| Thorold.....         | 860 | 10  |
| Grimsby.....         | 870 | 34  |
| Cabot Head.....      | 904 | 25  |

Total Depth:..... 929'.

Geologist: W. E. Koepke.

Water

Gas

Fresh at 46'.  
 Sulphur at 57' and 85'.

At 898' to 908'.

## PLACE WALPOLE No. 41

Lake Erie.

Co-ordinates: 42° 44' 32.1" N., 80° 03' 46.7" W.  
 Elevation: 572' + 15' D.F.  
 Driller: Place Gas & Oil Co., Ltd.  
 Completed: August 16, 1963.  
 Result: Gas Producer.  
 Reported Flow: 185 Mcf/d. WHP. 480 psig.

| Formation        | Top | Thickness |
|------------------|-----|-----------|
| Lake.....        | 15  | 36        |
| Drift.....       | 51  | 4         |
| Bois Blanc.....  | 55  | 135       |
| Springvale.....  | 190 | 20        |
| Bass Island..... | 210 | 54        |
| Salina.....      | 264 | 338       |

Top of A2—542

|                      |       |     |
|----------------------|-------|-----|
| Guelph-Lockport..... | 602   | 263 |
| Rochester.....       | 865   | 50  |
| Irondequoit.....     | 915   | 6   |
| Reynales.....        | 921   | 6   |
| Thorold.....         | 927   | 4   |
| Grimsby.....         | 931   | 40  |
| Cabot Head.....      | 971   | 53  |
| Manitoulin.....      | 1,024 | 22  |
| Whirlpool.....       | 1,046 | 9   |
| Queenston.....       | 1,055 | 5   |

Total Depth:..... 1,060'.

Geologist: W. E. Koepke.

Water

Gas

Fresh at 62' and 78'.  
 Sulphur at 636'.

Show at 636'.  
 At 935' to 965'.

PLACE WALPOLE No. 42

Lake Erie.

Co-ordinates; 42° 44' 14" N., 80° 04' 02" W.  
Elevation: 572' + 15' D.F.  
Driller: Place Gas and Oil Co., Ltd.  
Completed: July 24, 1963.  
Result: Gas Producer.  
Reported Flow: 247 Mcf/d. WHP. 470 psig.

| Formation            | Top    | Thickness |
|----------------------|--------|-----------|
| Lake.....            | 15     | 14        |
| Drift.....           | 29     | 1         |
| Bois Blanc.....      | 30     | 113       |
| Bass Island.....     | 143    | 72        |
| Salina.....          | 215    | 348       |
| Top of A2—501        |        |           |
| Guelph-Lockport..... | 563    | 260       |
| Rochester.....       | 823    | 47        |
| Irondequoit.....     | 870    | 7         |
| Reynales.....        | 877    | 7         |
| Thorold.....         | 884    | 4         |
| Grimsby.....         | 888    | 42        |
| Cabot Head.....      | 930    | 73        |
| Manitoulin.....      | 1,003  | 2         |
| Whirlpool.....       | 1,005  | 5         |
| Queenston.....       | 1,010  | 8         |
| Total Depth:.....    | 1,018' |           |

Geologist: W. E. Koepke.

|                          |                  |
|--------------------------|------------------|
| Water                    | Gas              |
| Fresh at 42'.            | At 880' to 885'. |
| Sulphur at 67' and 176'. |                  |

HALDIMAND GAS AND OIL No. 452

North Cayuga tp., lot 45, con. I S.T.R.

Co-ordinates: 2,600' S., 225' E.  
Elevation: 680' + 1'.  
Driller: Haldimand Gas & Oil Wells, Ltd.  
Completed: March 1, 1963.  
Result: Gas Producer.  
Reported Flow: 24 Mcf/d. WHP. 360 psig.

| Formation            | Top  | Thickness |
|----------------------|------|-----------|
| Drift.....           | 1    | 19        |
| Bois Blanc.....      | 20   | 16        |
| Bass Island.....     | 36   | 43        |
| Salina.....          | 79   | 333       |
| Top of A2—342        |      |           |
| Guelph-Lockport..... | 412  | 230       |
| Rochester.....       | 642  | 55        |
| Irondequoit.....     | 697  | 4         |
| Reynales.....        | 701  | 9         |
| Thorold.....         | 710  | 10        |
| Grimsby.....         | 720  | 40        |
| Cabot Head.....      | 760  | 39        |
| Manitoulin.....      | 799  | 21        |
| Whirlpool.....       | 820  | 17        |
| Queenston.....       | 837  | 38        |
| Total Depth:.....    | 875' |           |

Geologist: W. E. Koepke.

|                          |                     |
|--------------------------|---------------------|
| Water                    | Gas                 |
| Fresh at 54'.            | At 716' to 735' and |
| Sulphur at 76', 210' and | 826' to 832'.       |
| 540'.                    |                     |

HALDIMAND GAS & OIL No. 451

North Cayuga tp., lot 46, con. I S.T.R.

Co-ordinates: 400' S., 350' E.  
Elevation: 682' + 1'.  
Driller: Haldimand Gas & Oil Wells, Ltd.  
Completed: January 14, 1963.  
Result: Gas Producer.  
Reported Flow: 14 Mcf/d. WHP. 375 psig.

| Formation            | Top  | Thickness |
|----------------------|------|-----------|
| Drift.....           | 1    | 11        |
| Bois Blanc.....      | 12   | 8         |
| Bass Island.....     | 20   | 70        |
| Salina.....          | 90   | 315       |
| Top of A2—350        |      |           |
| Guelph-Lockport..... | 405  | 225       |
| Rochester.....       | 630  | 60        |
| Irondequoit.....     | 690  | 1         |
| Reynales.....        | 691  | 9         |
| Thorold.....         | 700  | 10        |
| Grimsby.....         | 710  | 30        |
| Cabot Head.....      | 740  | 52        |
| Manitoulin.....      | 792  | 18        |
| Whirlpool.....       | 810  | 18        |
| Queenston.....       | 828  | 35        |
| Total Depth:.....    | 863' |           |

Geologist: W. E. Koepke.

|                      |                  |
|----------------------|------------------|
| Water                | Gas              |
| Sulphur at 46', 176' | At 716' to 718', |
| 255' and 428'.       | 720' to 732' and |
|                      | 817' to 823'.    |

HALDIMAND GAS AND OIL No. 453

North Cayuga tp., lot 45, con. I S.T.R.

Co-ordinates: 150' S., 200' E.  
Elevation: 682' + 1'.  
Driller: Haldimand Gas & Oil Wells, Ltd.  
Completed: April 16, 1963.  
Result: Gas Producer.  
Reported Flow: 9.5 Mcf/d. WHP. N.R. psig.

| Formation            | Top  | Thickness |
|----------------------|------|-----------|
| Drift.....           | 1    | 17        |
| Bois Blanc.....      | 18   | 6         |
| Bass Island.....     | 24   | 46        |
| Salina.....          | 70   | 332       |
| Top of A2—330        |      |           |
| Guelph-Lockport..... | 402  | 220       |
| Rochester.....       | 622  | 58        |
| Irondequoit.....     | 680  | 10        |
| Reynales.....        | 690  | 8         |
| Thorold.....         | 698  | 12        |
| Grimsby.....         | 710  | 40        |
| Cabot Head.....      | 750  | 39        |
| Manitoulin.....      | 789  | 15        |
| Whirlpool.....       | 804  | 15        |
| Queenston.....       | 819  | 36        |
| Total Depth:.....    | 855' |           |

Geologist: W. E. Koepke.

|                       |                  |
|-----------------------|------------------|
| Water                 | Gas              |
| Fresh at 52' and 72'. | At 703' to 712', |
| Sulphur at 184', 240' | 718' to 728' and |
| and 550'.             | 812' to 814'.    |

## HALDIMAND GAS &amp; OIL No. 454

North Cayuga tp., lot 45, con. I S.T.R.

Co-ordinates: 2,620' N., 520' W.

Elevation: 682' + 1'.

Driller: Haldimand Gas &amp; Oil Wells, Ltd.

Completed: May 31, 1963.

Result: Gas Producer.

Reported Flow: 11 Mcf/d. WHP. 380 psig.

| Formation        | Top | Thickness |
|------------------|-----|-----------|
| Drift.....       | 1   | 17        |
| Bois Blanc.....  | 18  | 28        |
| Bass Island..... | 46  | 44        |
| Salina.....      | 90  | 330       |

Top of A2—362

|                      |     |     |
|----------------------|-----|-----|
| Guelph-Lockport..... | 420 | 222 |
| Rochester.....       | 642 | 62  |
| Irondequoit.....     | 704 | 11  |
| Reynales.....        | 715 | 5   |
| Thorold.....         | 720 | 10  |
| Grimsby.....         | 730 | 30  |
| Cabot Head.....      | 760 | 44  |
| Manitoulin.....      | 804 | 12  |
| Whirlpool.....       | 816 | 16  |
| Queenston.....       | 832 | 5   |

Total Depth:..... 837'.

Geologist: W. E. Koepke.

## Water

## Gas

Fresh at 60'.

Sulphur at 248' and 442'.

At 706' to 708' and  
744' to 750'.

## HALDIMAND GAS &amp; OIL No. 455

North Cayuga tp., lot 47, con. I S.T.R.

Co-ordinates: 1,500' N., 725' W.

Elevation: 688' + 1'.

Driller: Haldimand Gas &amp; Oil Wells, Ltd.

Completed: July 9, 1963.

Result: Gas Producer.

Reported Flow: 9 Mcf/d. WHP. 360 psig.

| Formation        | Top | Thickness |
|------------------|-----|-----------|
| Drift.....       | 1   | 14        |
| Bois Blanc.....  | 15  | 21        |
| Bass Island..... | 36  | 44        |
| Salina.....      | 80  | 342       |

Top of A2—358

|                      |     |     |
|----------------------|-----|-----|
| Guelph-Lockport..... | 422 | 228 |
| Rochester.....       | 650 | 58  |
| Irondequoit.....     | 708 | 7   |
| Reynales.....        | 715 | 5   |
| Thorold.....         | 720 | 4   |
| Grimsby.....         | 724 | 42  |
| Cabot Head.....      | 766 | 54  |
| Manitoulin.....      | 820 | 6   |
| Whirlpool.....       | 826 | 10  |
| Queenston.....       | 836 | 5   |

Total Depth:..... 841'.

Geologist: W. E. Koepke.

## Water

## Gas

Fresh at 48'.

Sulphur at 108', 240'  
and 560'.

Show at 715'.

At 734' to 742'.

## HALDIMAND GAS &amp; OIL No. 456

North Cayuga tp., lot 43, con. I S.T.R.

Co-ordinates: 2,600' N., 550' E.

Elevation: 680' + 1'.

Driller: Haldimand Gas &amp; Oil Wells, Ltd.

Completed: August 16, 1963.

Result: Gas Producer.

Reported Flow: 26 Mcf/d. WHP. 330 psig.

| Formation        | Top | Thickness |
|------------------|-----|-----------|
| Drift.....       | 1   | 12        |
| Bois Blanc.....  | 13  | 22        |
| Bass Island..... | 45  | 23        |
| Salina.....      | 68  | 352       |

Top of A2—348

|                      |     |     |
|----------------------|-----|-----|
| Guelph-Lockport..... | 420 | 226 |
| Rochester.....       | 646 | 63  |
| Irondequoit.....     | 709 | 5   |
| Reynales.....        | 714 | 6   |
| Thorold.....         | 720 | 8   |
| Grimsby.....         | 728 | 27  |
| Cabot Head.....      | 755 | 50  |
| Manitoulin.....      | 805 | 14  |
| Whirlpool.....       | 819 | 12  |
| Queenston.....       | 831 | 7   |

Total Depth:..... 838'.

Geologist: W. E. Koepke.

## Water

## Gas

Fresh at 25' and 70'.

Sulphur at 220'.

At 706' to 708' and  
744' to 751'.

## HALDIMAND GAS &amp; OIL No. 457

North Cayuga tp., lot 42, con. I S.T.R.

Co-ordinates: 2,600' N., 500' E.

Elevation: 680' + 1'.

Driller: Haldimand Gas &amp; Oil Wells, Ltd.

Completed: September 27, 1963.

Result: Gas Producer.

Reported Flow: 50 Mcf/d. WHP. 325 psig.

| Formation        | Top | Thickness |
|------------------|-----|-----------|
| Drift.....       | 1   | 7         |
| Bois Blanc.....  | 8   | 42        |
| Bass Island..... | 50  | 40        |
| Salina.....      | 90  | 332       |

Top of A2—350

|                      |     |     |
|----------------------|-----|-----|
| Guelph-Lockport..... | 422 | 230 |
| Rochester.....       | 652 | 52  |
| Irondequoit.....     | 704 | 8   |
| Reynales.....        | 712 | 6   |
| Thorold.....         | 718 | 10  |
| Grimsby.....         | 728 | 32  |
| Cabot Head.....      | 760 | 45  |
| Manitoulin.....      | 805 | 17  |
| Whirlpool.....       | 822 | 16  |
| Queenston.....       | 838 | 2   |

Total Depth:..... 840'.

Geologist: W. E. Koepke.

## Water

## Gas

Fresh at 35'.

Sulphur at 90', 265' and  
525'.

Show at 707' to 710'.

At 723' to 730'.

HALDIMAND GAS & OIL No. 458

North Cayuga tp., lot 41, con. I S.T.R.

Co-ordinates: 2,400' N., 450' E.  
Elevation: 680' + 1'.  
Driller: Haldimand Gas & Oil Wells, Ltd.  
Completed: November 4, 1963.  
Result: Gas Producer.  
Reported Flow: 40 Mcf/d. WHP. 350 psig.

| Formation            | Top  | Thickness |
|----------------------|------|-----------|
| Drift.....           | 1    | 6         |
| Bois Blanc.....      | 7    | 29        |
| Bass Island.....     | 36   | 34        |
| Salina.....          | 70   | 340       |
| Top of A2—340        |      |           |
| Guelph-Lockport..... | 410  | 226       |
| Rochester.....       | 636  | 60        |
| Irondequoit.....     | 696  | 8         |
| Reynales.....        | 704  | 5         |
| Thorold.....         | 709  | 7         |
| Grimsby.....         | 716  | 29        |
| Cabot Head.....      | 745  | 55        |
| Manitoulin.....      | 800  | 16        |
| Whirlpool.....       | 816  | 9         |
| Queenston.....       | 825  | 4         |
| Total Depth.....     | 829' |           |

Geologist: W. E. Koepke.

| Water                    | Gas              |
|--------------------------|------------------|
| Fresh at 30'.            | At 712' to 721'. |
| Sulphur at 80' and 205'. |                  |

HALDIMAND GAS & OIL No. 459

North Cayuga tp., lot 40, con. I S.T.R.

Co-ordinates: 2,600' N., 50' E.  
Elevation: 679' + 1'.  
Driller: E. Culver.  
Completed: December 3, 1963.  
Result: Abandoned.  
Reported Flow: 3 Mcf/d. WHP. N.R. psig.

| Formation            | Top  | Thickness |
|----------------------|------|-----------|
| Drift.....           | 1    | 20        |
| Bois Blanc.....      | 21   | 13        |
| Bass Island.....     | 34   | 41        |
| Salina.....          | 75   | 331       |
| Top of A2—325        |      |           |
| Guelph-Lockport..... | 406  | 230       |
| Rochester.....       | 636  | 51        |
| Irondequoit.....     | 687  | 8         |
| Reynales.....        | 695  | 3         |
| Thorold.....         | 698  | 7         |
| Grimsby.....         | 705  | 20        |
| Cabot Head.....      | 725  | 58        |
| Manitoulin.....      | 783  | 22        |
| Whirlpool.....       | 805  | 14        |
| Queenston.....       | 819  | 2         |
| Total Depth.....     | 821' |           |

Geologist: W. E. Koepke.

| Water                    | Gas                   |
|--------------------------|-----------------------|
| Fresh at 37'.            | Show at 705' to 707'. |
| Sulphur at 95' and 185'. |                       |

HALDIMAND GAS & OIL No. 460

North Cayuga tp., lot 44, con. I S.T.R.

Co-ordinates: 1,100' N., 550' W.  
Elevation: 682' + 1'.  
Driller: Haldimand Gas & Oil Wells, Ltd.  
Completed: December 14, 1963.  
Result: Gas Producer.  
Reported Flow: 40 Mcf/d. WHP. 360 psig.

| Formation            | Top  | Thickness |
|----------------------|------|-----------|
| Drift.....           | 1    | 11        |
| Bois Blanc.....      | 12   | 56        |
| Bass Island.....     | 68   | 40        |
| Salina.....          | 108  | 322       |
| Top of A2—380        |      |           |
| Guelph-Lockport..... | 430  | 235       |
| Rochester.....       | 665  | 55        |
| Irondequoit.....     | 720  | 4         |
| Reynales.....        | 730  | 10        |
| Thorold.....         | 740  | 32        |
| Grimsby.....         | 772  | 42        |
| Cabot Head.....      | 814  | 26        |
| Manitoulin.....      | 840  | 11        |
| Whirlpool.....       | 851  | 2         |
| Total Depth.....     | 853' |           |

Geologist: W. E. Koepke.

| Water                                | Gas              |
|--------------------------------------|------------------|
| Fresh at 30'.                        | At 744' to 760'. |
| Sulphur at 95', 220', 280' and 538'. |                  |

ERCO—No. 1

Sherbrooke tp., Naval Reserve.

Co-ordinates: 1800' N. of Rd. between Con. I & II, 502' W.  
Elevation: 574' + 1'.  
Driller: Culver Drilling Co.  
Completed: November 22, 1963.  
Result: Gas Producer.  
Reported Flow: 17 Mcf/d. WHP. N.R. psig.

| Formation            | Top  | Thickness |
|----------------------|------|-----------|
| Drift.....           | 1    | 45        |
| Salina.....          | 46   | 368       |
| Top of A2—360        |      |           |
| Guelph-Lockport..... | 414  | 216       |
| Rochester.....       | 630  | 68        |
| Irondequoit.....     | 698  | 7         |
| Reynales.....        | 705  | 15        |
| Thorold.....         | 720  | 6         |
| Grimsby.....         | 726  | 39        |
| Cabot Head.....      | 765  | 60        |
| Whirlpool.....       | 825  | 15        |
| Queenston.....       | 840  | 27        |
| Total Depth.....     | 867' |           |

Geologist: W. E. Koepke.

| Water                     | Gas                   |
|---------------------------|-----------------------|
| Fresh at 48'.             | Show at 742' to 743'. |
| Sulphur at 198' and 457'. | At 837' to 839'.      |

## ERCO No. 3

Sherbrooke tp., lot 5, con. II.

Co-ordinates: 500' N., 570' E.

Elevation: 585' ± 1'.

Driller: Culver Drilling Co.

Completed: December 19, 1963.

Result: Gas Producer.

Reported Flow: 83 Mcf/d. WHP. 365 psig.

| Formation       | Top  | Thickness |
|-----------------|------|-----------|
| Drift           | 1    | 59        |
| Bass Island     | 60   | 40        |
| Salina          | 100  | 332       |
| Top of A2—378   |      |           |
| Guelph-Lockport | 432  | 218       |
| Rochester       | 650  | 62        |
| Irondequoit     | 712  | 8         |
| Reynales        | 720  | 13        |
| Thorold         | 733  | 8         |
| Grimsby         | 741  | 39        |
| Cabot Head      | 780  | 56        |
| Whirlpool       | 836  | 11        |
| Queenston       | 849  | 25        |
| Total Depth     | 872' |           |

Geologist: W. E. Koepke.

Water Gas  
 Sulphur at 80' and 264'. At 714 to 723', 765' and 844' to 847'.

## JARVIS HEREFORD FARMS

C. Davidson 46-2

Walpole tp., lot 7, con. VII.

Co-ordinates: 1,895 S., 870' E.

Elevation:

Driller: Jarvis Hereford Farms.

Completed: April 27, 1963.

Result: Abandoned.

Reported Flow: 7 Mcf/d. WHP. 290 psig.

| Formation              | Top  | Thickness |
|------------------------|------|-----------|
| Drift                  | 0    | 23        |
| Bois Blanc             | 23   | 77        |
| Bass Island and Salina | 100  | 395       |
| Guelph-Lockport        | 495  | 270       |
| Rochester              | 765  | 50        |
| Clinton                | 815  | 30        |
| Grimsby                | 845  | 40        |
| Cabot Head             | 885  | 50        |
| Whirlpool              | 935  | 10        |
| Queenston              | 945  | 5         |
| Total Depth            | 950' |           |

Geologist: Driller's Log.

Water Gas  
 Fresh at 55'. Show at 818' to 820'.  
 Sulphur at 110'.

## Halton County

## ANTHONY No. 41 - ACTON No. 32

Esquesing tp., lot 16, con. VI.

Co-ordinates: 25' S., 316' E.

Elevation: 906' ± 2'.

Driller: L. C. McKillop.

Completed: March 1, 1963.

Result: Abandoned.

| Formation      | Top    | Thickness |
|----------------|--------|-----------|
| Drift          | 2      | 27        |
| Queenston      | 29     | 453       |
| Meaford-Dundas | 482    | 676       |
| Collingwood    | 1,158  | 119       |
| Cobourg        | 1,277  | 209       |
| Sherman Fall   | 1,486  | 84        |
| Kirkfield      | 1,570  | 205       |
| Coboconk       | 1,775  | 19        |
| Gull River     | 1,794  | 104       |
| Shadow Lake    | 1,898  | 3         |
| Total Depth    | 1,901' |           |

Geologist: W. E. Koepke.

Water Gas  
 Fresh at 122'. Show at 1,792' to 1,794'.

## ANTHONY No. 42 - ACTON No. 33

Esquesing tp., lot 16, con. III.

Co-ordinates: 1,120' N., 586' W.

Elevation: 1,804' ± 2'.

Driller: L. C. McKillop.

Completed: November 9, 1963.

Result: Abandoned.

| Formation                      | Top    | Thickness |
|--------------------------------|--------|-----------|
| Drift                          | 2      | 1         |
| Guelph-Lockport                | 3      | 27        |
| Reynales                       | 30     | 24        |
| Thorold                        | Trace  |           |
| Cabot Head                     | 54     | 32        |
| Manitoulin                     | 86     | 30        |
| Whirlpool                      | 116    | 14        |
| Queenston                      | 130    | 465       |
| Meaford-Dundas and Collingwood | 595    | 829       |
| Cobourg                        | 1,424  | 210       |
| Sherman Fall                   | 1,634  | 91        |
| Kirkfield                      | 1,725  | 202       |
| Gull River                     | 1,927  | 129       |
| Shadow Lake                    | 2,056  | 26        |
| Total Depth                    | 2,082' |           |

Geologist: W. E. Koepke.

Water Oil  
 Fresh at 86'. Show at 1,993' to 1,995'.

## LORN - MAC No. 1 - ACTON No. 1

Esquesing tp., lot 17, con. V.

Co-ordinates: 790' S. of Rd. 545' E. of c/l.

Elevation: 952' ± 2'.

Driller: L. C. McKillop.

Completed: July 24, 1963.

Result: Abandoned.

| Formation      | Top    | Thickness |
|----------------|--------|-----------|
| Drift          | 2      | 25        |
| Queenston      | 27     | 458       |
| Meaford-Dundas | 485    | 635       |
| Collingwood    | 1,120  | 162       |
| Cobourg        | 1,282  | 232       |
| Sherman Fall   | 1,514  | 61        |
| Kirkfield      | 1,575  | 195       |
| Coboconk       | 1,770  | 35        |
| Gull River     | 1,805  | 107       |
| Shadow Lake    | 1,912  | 23        |
| Total Depth    | 1,935' |           |

Geologist: W. E. Koepke.

Water  
 Fresh at 47' and 142'.



B. P.-TRIAD ET AL. STEPHEN 6-XIX  
Stephen tp., lot 6, con. XIX.

Co-ordinates: 330' N., 1,625' W.  
Elevation: 657' + 2'.  
Driller: Demaray and Nichols.  
Completed: June 14, 1963.  
Result: Abandoned.  
Reported Flow: 16 Mcf/d. WHP. N.R. psig.

| Formation            | Top    | Thickness |
|----------------------|--------|-----------|
| Drift.....           | 2      | 108       |
| Dundee.....          | 110    | 62        |
| Detroit River.....   | 172    | 348       |
| Bois Blanc.....      | 520    | 216       |
| Bass Island.....     | 736    | 126       |
| Salina.....          | 862    | 592       |
| Top of A2—1,373      |        |           |
| Guelph-Lockport..... | 1,454  | 498       |
| Rochester.....       | 1,952  | 22        |
| Reynales.....        | 1,974  | 14        |
| Cabot Head.....      | 1,988  | 2         |
| Total Depth:.....    | 1,990' |           |

Geologist: W. E. Koepke.  
Water Fresh at 126'. Gas At 1,495' to 1,508' and Sulphur at 330'. 1,558' to 1,563'. Salt at 1781.'

J. B. BRIEN & ASSOC. No. 2  
Stephen tp., lot 13, con. III.

Co-ordinates: 630' N., 1,850' W.  
Elevation: 822' + 1'.  
Driller: W. Marsh.  
Completed: June 7, 1963.  
Result: Abandoned.

| Formation            | Top    | Thickness |
|----------------------|--------|-----------|
| Drift.....           | 1      | 59        |
| Dundee.....          | 60     | 84        |
| Detroit River.....   | 144    | 330       |
| Bois Blanc.....      | 474    | 176       |
| Bass Island.....     | 650    | 112       |
| Salina.....          | 762    | 845       |
| Top of A2—1,322      |        |           |
| Top of A1—1,492      |        |           |
| Guelph-Lockport..... | 1,607  | 81        |
| Rochester.....       | 1,688  | 20        |
| Reynales.....        | 1,708  | 9         |
| Cabot Head.....      | 1,717  | 46        |
| Manitoulin.....      | 1,763  | 29        |
| Total Depth:.....    | 1,792' |           |

Geologist: W. E. Koepke.  
Water Fresh at 60' to 795'. Salt at 1,501 and 1,635'.

Kent County

BRADFORD-MAYO 21-1-4  
Chatham tp., Gore, lot 21, con. I.

Co-ordinates: 1,750' S., 542' E.  
Elevation: 579' + 3'.  
Driller: Rawlings Drilling Co., Ltd.  
Completed: October 24, 1963.  
Result: Abandoned.

| Formation            | Top    | Thickness |
|----------------------|--------|-----------|
| Drift.....           | 3      | 67        |
| Kettle Point.....    | 70     | 280       |
| Hamilton.....        | 350    | 158       |
| Dundee.....          | 508    | 90        |
| Detroit River.....   | 620    | 258       |
| Bois Blanc.....      | 878    | 232       |
| Bass Island.....     | 1,110  | 107       |
| Salina.....          | 1,217  | 608       |
| Top of A2—1,562      |        |           |
| Top of A1—1,708      |        |           |
| Guelph-Lockport..... | 1,825  | 137       |
| Rochester.....       | 1,962  | 15        |
| Total Depth:.....    | 1,977' |           |

Geologist: W. E. Koepke.  
Water Fresh at 67'. Sulphur at 590'. Salt at 1,595'.

YORK PRODUCING No. 10  
Chatham tp., lot 13, con. XI.

Co-ordinates: 575' N. of c/l, 715' E.  
Elevation: 587' + 3'.  
Driller: Mandley Drilling Contractors, Ltd.  
Completed: July 15, 1963.  
Result: Abandoned.

| Formation          | Top   | Thickness |
|--------------------|-------|-----------|
| Drift.....         | 3     | 51        |
| Kettle Point.....  | 54    | 164       |
| Hamilton.....      | 218   | 190       |
| Dundee.....        | 408   | 79        |
| Columbus.....      | 487   | 43        |
| Detroit River..... | 530   | 190       |
| Bois Blanc.....    | 720   | 155       |
| Bass Island.....   | 875   | 183       |
| Salina.....        | 1,058 | 576       |
| Top of A2—1,408    |       |           |
| Top of A1—1,544    |       |           |

Guelph-Lockport..... 1,634 56  
Total Depth:..... 1,690'.  
Geologist: W. E. Koepke.

Water Fresh at 51'. Gas Show at 51', 1,430' and 1,546'. Oil Show at 1,646' to 1,652'. Sulphur at 487' and 950'.

UNITED REEF No. 10  
Howard tp., lot 4, con. VIII.

Co-ordinates: 544' N., 700' E.  
Elevation: 647' + 3'.  
Driller: Mandley Drilling Contractors, Ltd.  
Completed: August 27, 1963.  
Result: Abandoned.

| Formation            | Top    | Thickness |
|----------------------|--------|-----------|
| Drift.....           | 3      | 115       |
| Kettle Point.....    | 118    | 102       |
| Hamilton.....        | 220    | 250       |
| Dundee.....          | 470    | 198       |
| Columbus.....        | 668    | 7         |
| Detroit River.....   | 675    | 119       |
| Bois Blanc.....      | 794    | 96        |
| Bass Island.....     | 890    | 328       |
| Salina.....          | 1,218  | 568       |
| Top of A2—1,650      |        |           |
| Top of A1—1,736      |        |           |
| Guelph-Lockport..... | 1,786  | 274       |
| Rochester.....       | 2,060  | 29        |
| Dyer Bay.....        | 2,089  | 7         |
| Cabot Head.....      | 2,096  | 129       |
| Manitoulin.....      | 2,225  | 25        |
| Queenston.....       | 2,250  | 373       |
| Meaford-Dundas.....  | 2,623  | 462       |
| Collingwood.....     | 3,085  | 93        |
| Cobourg.....         | 3,178  | 107       |
| Sherman Fall.....    | 3,285  | 127       |
| Kirkfield.....       | 3,412  | 196       |
| Coboconk.....        | 3,608  | 98        |
| Gull River.....      | 3,706  | 342       |
| Shadow Lake.....     | 4,048  | 5         |
| Trempealeau.....     | 4,053  | 44        |
| Total Depth:.....    | 4,097' |           |

Geologist: W. E. Koepke.

Water Fresh at 95' and 122'. Sulphur at 635'. Salt at 1,852' and 4,076'.

## ALLEGANY PRODUCING CORP. No. 84-BARTOK No. 1

Orford tp., lot 4, con. VII.

Co-ordinates: 999' S., 494' W.  
 Elevation: 673' + 4'.  
 Driller: H. Meier.  
 Completed: February 14, 1963.  
 Result: Abandoned.

| Formation                           | Top    | Thickness |
|-------------------------------------|--------|-----------|
| Drift.....                          | 4      | 139       |
| Kettle Point.....                   | 143    | 107       |
| Hamilton.....                       | 250    | 248       |
| Dundee.....                         | 498    | 162       |
| Columbus.....                       | 660    | 10        |
| Detroit River.....                  | 670    | 165       |
| Bois Blanc.....                     | 835    | 244       |
| Bass Island.....                    | 1,079  | 143       |
| Salina.....                         | 1,222  | 610       |
| Top of A2—1,619                     |        |           |
| Top of A1—1,713                     |        |           |
| Guelph-Lockport.....                | 1,832  | 178       |
| Rochester.....                      | 2,010  | 33        |
| Reynales.....                       | 2,043  | 1         |
| Dyer Bay.....                       | 2,044  | 3         |
| Cabot Head.....                     | 2,047  | 24        |
| Manitoulin.....                     | 2,171  | 33        |
| Queenston.....                      | 2,204  | 370       |
| Meaford-Dundas and Collingwood..... | 2,574  | 547       |
| Trenton.....                        | 3,121  | 444       |
| Coboconk and Gull River.....        | 3,565  | 424       |
| Shadow Lake.....                    | 3,989  | 5         |
| Cambrian.....                       | 3,994  | 12        |
| Trempealeau.....                    | 4,006  | 16        |
| Total Depth:.....                   | 4,022' |           |

Geologist: W. E. Koepke.

| Water                       | Gas                       |
|-----------------------------|---------------------------|
| Fresh at 110'.              | Show at 4,005' to 4,009'. |
| Sulphur at 645' and 1,022'. |                           |
| Salt at 1,989' and 4,005'.  |                           |

## ALLEGANY PRODUCING CORP. No. 86

Orford tp., lot 9, con. X.

Co-ordinates: 1,100' S., 400' W.  
 Elevation: 671' + 5'.  
 Driller: H. Meier.  
 Completed: July 27, 1963.  
 Result: Abandoned.  
 Reported Flow: 11.5 Mcf/d. WHP. N.R. psig.

| Formation            | Top    | Thickness |
|----------------------|--------|-----------|
| Drift.....           | 5      | 155       |
| Kettle Point.....    | 160    | 22        |
| Hamilton.....        | 182    | 242       |
| Dundee.....          | 424    | 138       |
| Columbus.....        | 562    | 21        |
| Detroit River.....   | 583    | 155       |
| Bois Blanc.....      | 738    | 208       |
| Bass Island.....     | 946    | 170       |
| Salina.....          | 1,116  | 631       |
| Top of A2—1,615      |        |           |
| Top of A1—1,706      |        |           |
| Guelph-Lockport..... | 1,747  | 253       |
| Rochester.....       | 2,000  | 30        |
| Reynales.....        | 2,030  | 3         |
| Cabot Head.....      | 2,033  | 135       |
| Manitoulin.....      | 2,168  | 26        |
| Queenston.....       | 2,194  | 376       |
| Meaford-Dundas.....  | 2,570  | 415       |
| Collingwood.....     | 2,985  | 119       |
| Cobourg.....         | 3,104  | 96        |
| Sherman Fall.....    | 3,200  | 158       |
| Kirkfield.....       | 3,358  | 196       |
| Coboconk.....        | 3,554  | 84        |
| Gull River.....      | 3,638  | 335       |
| Shadow Lake.....     | 3,973  | 3         |
| Trempealeau.....     | 3,976  | 20        |
| Eau Claire.....      | 3,996  | 26        |
| Arkose.....          | 4,022  | 14        |
| Precambrian.....     | 4,036  | 5         |
| Total Depth:.....    | 4,041' |           |

Geologist: W. E. Koepke.

| Water            | Gas          | Oil               |
|------------------|--------------|-------------------|
| Fresh at 135'.   | At 1,774' to | Show at 1,747' to |
| Sulphur at 573'. | 1,779'.      | 1,749', 3,920' to |
| Salt at 1,653'.  |              | 3,926' and 3,989' |
| 1,747' and       |              | to 3,994'.        |
| 3,989'.          |              |                   |

B.A.-MORAVIAN I.R.-25  
Orford tp., lot 25, I.R. No. 47.

Co-ordinates: 385' S., 418' E.  
Elevation: 641' + 4'.  
Driller: Stubble and Stubble.  
Completed: February 26, 1963.  
Result: Abandoned.  
Reported Flow: 12.77 Mcf/d. 2 bbl/d. WHP. N.R. psig.

| Formation                         | Top    | Thickness |
|-----------------------------------|--------|-----------|
| Drift.....                        | 4      | 89        |
| Hamilton.....                     | 93     | 217       |
| Dundee.....                       | 310    | 146       |
| Columbus.....                     | 456    | 19        |
| Detroit River.....                | 475    | 195       |
| Bois Blanc.....                   | 670    | 232       |
| Bass Island.....                  | 902    | 155       |
| Salina.....                       | 1,057  | 716       |
| Top of A2—1,589                   |        |           |
| Top of A1—1,703                   |        |           |
| Guelph-Lockport.....              | 1,773  | 195       |
| Rochester.....                    | 1,968  | 32        |
| Reynales.....                     | 2,000  | 2         |
| Dyer Bay.....                     | 2,002  | 8         |
| Cabot Head.....                   | 2,010  | 128       |
| Manitoulin.....                   | 2,138  | 24        |
| Queenston.....                    | 2,162  | 374       |
| Meaford-Dundas and Collingwood... | 2,536  | 508       |
| Cobourg.....                      | 3,044  | 83        |
| Sherman Fall.....                 | 3,127  | 179       |
| Kirkfield.....                    | 3,306  | 194       |
| Coboconk.....                     | 3,500  | 100       |
| Gull River.....                   | 3,600  | 325       |
| Shadow Lake.....                  | 3,925  | 5         |
| Trempealeau.....                  | 3,930  | 13        |
| Eau Claire.....                   | 3,943  | 23        |
| Precambrian.....                  | 3,966  | 2         |
| Total Depth:.....                 | 3,968' |           |

Geologist: W. E. Koepke.

| Water              | Gas          | Oil               |
|--------------------|--------------|-------------------|
| Fresh at 9'.       | At 3,938' to | Show at 1,776' to |
| Sulphur at 462'.   | 3,941'.      | 1,783' and at     |
| Salt at 1,783' and |              | 3,941' to 3,943'. |
| 3,941'.            |              |                   |

B.A.-MORAVIAN I.R.-40  
Orford tp., lot 40, I.R. No. 47.

Co-ordinates: 714' N., 347' W.  
Elevation: 653' + 4'.  
Driller: Stubble and Stubble.  
Completed: November 1, 1963.  
Result: Abandoned.  
Reported Flow: 70 Mcf/d. WHP. 1,585 psig.

| Formation                         | Top    | Thickness |
|-----------------------------------|--------|-----------|
| Drift.....                        | 4      | 106       |
| Hamilton.....                     | 110    | 212       |
| Dundee.....                       | 322    | 154       |
| Columbus.....                     | 476    | 22        |
| Detroit River.....                | 498    | 152       |
| Bois Blanc.....                   | 650    | 277       |
| Bass Island.....                  | 927    | 153       |
| Salina.....                       | 1,080  | 744       |
| Top of A2—1,606                   |        |           |
| Top of A1—1,716                   |        |           |
| Guelph-Lockport.....              | 1,824  | 163       |
| Rochester.....                    | 1,987  | 25        |
| Dyer Bay.....                     | 2,012  | 10        |
| Cabot Head.....                   | 2,022  | 120       |
| Manitoulin.....                   | 2,142  | 38        |
| Queenston.....                    | 2,180  | 368       |
| Meaford-Dundas and Collingwood... | 2,548  | 506       |
| Cobourg.....                      | 3,054  | 126       |
| Sherman Fall.....                 | 3,180  | 122       |
| Kirkfield.....                    | 3,302  | 210       |
| Coboconk.....                     | 3,512  | 92        |
| Gull River.....                   | 3,604  | 326       |
| Shadow Lake.....                  | 3,930  | 5         |
| Trempealeau.....                  | 3,935  | 9         |
| Eau Claire.....                   | 3,944  | 31        |
| Precambrian.....                  | 3,975  | 3         |
| Total Depth:.....                 | 3,978' |           |

Geologist: W. E. Koepke.

| Water            | Gas                  |
|------------------|----------------------|
| Fresh at 97'.    | At 3,938' to 3,941'. |
| Sulphur at 476'. |                      |
| Salt at 1,968'.  |                      |

CENTRAL PIPE LINE-  
S. EARL-DUART No. 1

Orford tp., lot 5, con. S.M.R.

Co-ordinates: 670' N., 605' W.

Elevation: 681' + 4'.

Drillers: S. Earl; Mandley Drilling;

Central Pipeline Co., Ltd.

Completed: November 19, 1963.

Result: Oil Producer.

Reported Flow: 10 Mcf/d. 25 bbl/d. WHP. N.R. psig.

| Formation             | Top    | Thickness |
|-----------------------|--------|-----------|
| Drift.....            | 4      | 183       |
| Kettle Point.....     | 187    | 71        |
| Hamilton.....         | 258    | 256       |
| Dundee.....           | 514    | 146       |
| Columbus.....         | 660    | 65        |
| Detroit River.....    | 725    | 83        |
| Bois Blanc.....       | 808    | 184       |
| Oriskany.....         | 992    | 40        |
| Bass Island.....      | 1,032  | 230       |
| Salina.....           | 1,262  | 460       |
| Top of A2—1,606       |        |           |
| Top of A1—1,687       |        |           |
| Guelph-Lockport.....  | 1,722  | 273       |
| Rochester.....        | 1,995  | 45        |
| Cabot Head.....       | 2,040  | 108       |
| Manitoulin.....       | 2,148  | 32        |
| Queenston.....        | 2,180  | 384       |
| Meaford-Dundas.....   | 2,564  | 476       |
| Collingwood.....      | 3,040  | 124       |
| Cobourg.....          | 3,164  | 112       |
| Sherman Fall.....     | 3,276  | 152       |
| Kirkfield.....        | 3,428  | 182       |
| Coboconk.....         | 3,610  | 92        |
| Gull River.....       | 3,702  | 320       |
| Shadow Lake.....      | 4,022  | 5         |
| Cambrian.....         | 4,027  | 6         |
| Trempealeau.....      | 4,033  | 74        |
| Eau Claire.....       | 4,107  | 13        |
| Mount Simon.....      | 4,120  | 13        |
| Precambrian.....      | 4,133  | 1         |
| Total Depth.....      | 4,134' |           |
| P.B. Total Depth..... | 4,080' |           |

Geologist: W. E. Koepke.

| Water                   | Gas                       | Oil                  |
|-------------------------|---------------------------|----------------------|
| Fresh at 132' and 199'. | Show at 4,031' to 4,034'. | At 4,031' to 4,034'. |
| Sulphur at 668'.        |                           |                      |
| Salt at 890'.           |                           |                      |
| 1,810' and 4,060'.      |                           |                      |

## IMPERIAL OIL (No. 827)-MILLS No. 2

Orford tp., lot 54, con. N.T.R.

Co-ordinates: 2,802' N., along W.L.L., 568' E.

Elevation: 653' + 3'.

Driller: L. O. Patterson.

Completed: January 11, 1963.

Result: Oil Producer.

Reported Flow: 350 Mcf/d. 150 bbl/d. WHP. N.R. psig.

| Formation                           | Top    | Thickness |
|-------------------------------------|--------|-----------|
| Drift.....                          | 3      | 167       |
| Hamilton.....                       | 170    | 167       |
| Dundee.....                         | 337    | 148       |
| Columbus.....                       | 485    | 20        |
| Detroit River.....                  | 505    | 152       |
| Bois Blanc.....                     | 657    | 249       |
| Bass Island.....                    | 906    | 233       |
| Salina.....                         | 1,139  | 453       |
| Top of A2—1,488                     |        |           |
| Top of A1—1,573                     |        |           |
| Guelph-Lockport.....                | 1,592  | 277       |
| Rochester.....                      | 1,869  | 36        |
| Reynales.....                       | 1,905  | 5         |
| Dyer Bay.....                       | 1,910  | 3         |
| Cabot Head.....                     | 1,913  | 132       |
| Manitoulin.....                     | 2,045  | 20        |
| Queenston.....                      | 2,065  | 395       |
| Meaford-Dundas and Collingwood..... | 2,460  | 602       |
| Trenton.....                        | 3,062  | 448       |
| Coboconk and Gull River.....        | 3,510  | 421       |
| Shadow Lake.....                    | 3,931  | 5         |
| Cambrian.....                       | 3,936  | 8         |
| Trempealeau.....                    | 3,944  | 14        |
| Total Depth.....                    | 3,958' |           |

Geologist: B. V. Sanford.

| Water                    | Gas                                       | Oil                  |
|--------------------------|---|----------------------|
| Fresh at 128'.           | At 1,489' to 1,496' and 3,950' to 3,952'. | At 3,952' to 3,958'. |
| Sulphur at 490'.         |   |                      |
| Salt at 839' and 1,624'. |   |                      |

IMPERIAL OIL (No. 829)-52 N.T.R.

Orford tp., lot 52, con. N.T.R.

Co-ordinates: 1,153' N. along W.L.L., 672' E.  
Elevation: 648' + 4'.  
Driller: W. Shaw.  
Completed: February 1, 1963.  
Result: Oil Producer.  
Reported Flow: 281 Mcf/d. 40 bbl/d WHP. N.R. psig.

| Formation                         | Top    | Thickness |
|-----------------------------------|--------|-----------|
| Drift.....                        | 4      | 174       |
| Hamilton.....                     | 178    | 208       |
| Dundee.....                       | 386    | 172       |
| Columbus.....                     | 558    | 12        |
| Detroit River.....                | 570    | 153       |
| Bois Blanc.....                   | 723    | 268       |
| Bass Island.....                  | 991    | 169       |
| Salina.....                       | 1,160  | 475       |
| Top of A2—1,517                   |        |           |
| Top of A1—1,598                   |        |           |
| Guelph-Lockport.....              | 1,635  | 264       |
| Rochester.....                    | 1,899  | 33        |
| Reynales.....                     | 1,932  | 14        |
| Cabot Head.....                   | 1,946  | 5         |
| Manitoulin.....                   | 2,051  | 41        |
| Queenston.....                    | 2,092  | 386       |
| Meaford-Dundas and Collingwood... | 2,478  | 584       |
| Trenton.....                      | 3,062  | 443       |
| Coboconk and Gull River.....      | 3,505  | 416       |
| Shadow Lake.....                  | 3,921  | 5         |
| Cambrian.....                     | 3,926  | 8         |
| Trempealeau.....                  | 3,934  | 67        |
| Total Depth:.....                 | 4,001' |           |
| Plugged Back Total Depth:         | 3,950' |           |

Geologist: W. E. Koepke.

| Water            | Gas          | Oil                  |
|------------------|--------------|----------------------|
| Fresh at 145'.   | At 3,930' to | At 3,939' to 3,947', |
| Sulphur at 550'. | 3,947'.      | 3,950' to 3,954'     |
| Salt at 974' and |              | and 3,954' to        |
| 1,686'.          |              | 3,959'.              |

IMPERIAL OIL (No. 837)-CLEARVILLE No. 7

Orford tp., lot 56, con. N.T.R.

Co-ordinates: 1,139' N. along E.L.L., 398' W.  
Elevation: 653' + 4'.  
Driller: L. O. Patterson.  
Completed: April 4, 1963.  
Result: Oil Producer.  
Reported Flow: 124 Mcf/d. 40 bbl/d. WHP. 530 psig.

| Formation            | Top     | Thickness |
|----------------------|---------|-----------|
| Drift.....           | 4       | 192       |
| Hamilton.....        | 196     | 137       |
| Dundee.....          | 333     | 143       |
| Columbus.....        | 476     | 69        |
| Detroit River.....   | 545     | 85        |
| Bois Blanc.....      | 630     | 115       |
| Oriskany.....        | 745     | 114       |
| Bass Island.....     | 859     | 281       |
| Salina.....          | 1,140   | 472       |
| Top of A2—1,501      |         |           |
| Top of A1—1,580      |         |           |
| Guelph-Lockport..... | 1,612   | 270       |
| Rochester.....       | 1,882   | 32        |
| Reynales.....        | 1,914   | 3         |
| Dyer Bay.....        | 1,917   | 3         |
| Cabot Head.....      | 1,920   | 124       |
| Manitoulin.....      | 2,044   | 26        |
| Queenston.....       | 2,070   | 395       |
| Meaford-Dundas.....  | 2,465   | 457       |
| Collingwood.....     | 2,922   | 143       |
| Cobourg.....         | 3,065   | 100       |
| Sherman Fall.....    | 3,165   | 125       |
| Kirkfield.....       | 3,290   | 222       |
| Coboconk.....        | 3,512   | 86        |
| Gull River.....      | 3,598   | 337       |
| Shadow Lake.....     | 3,935   | 9         |
| Cambrian.....        | 3,944   | 8         |
| Trempealeau.....     | 3,952   | 10        |
| Total Depth:.....    | 3,962'. |           |

Geologist: W. E. Koepke.

| Water            | Gas                   | Oil        |
|------------------|-----------------------|------------|
| Fresh at 145'.   | Show at 475' to 495'. | At 3,939'  |
| Sulphur at 475'. | At 1,622' and 3,949'  | to 3,952'. |
| Salt at 900' and | to 3,952'.            |            |
| 1,655'.          |                       |            |

## IMPERIAL OIL No. 841-McBRIEN No. 3

Orford tp., lot 53, con. N.T.R.

Co-ordinates: 3,841' N. along E.L.L., 691' W.

Elevation: 658' + 5'.

Driller: W. Shaw.

Completed: April 23, 1963.

Result: Oil Producer.

Reported Flow: 155 Mcf/d. 65 bbl/d. WHP, 550 psig.

| Formation          | Top   | Thickness |
|--------------------|-------|-----------|
| Drift.....         | 5     | 205       |
| Hamilton.....      | 210   | 144       |
| Dundee.....        | 354   | 166       |
| Columbus.....      | 520   | 15        |
| Detroit River..... | 535   | 127       |
| Bois Blanc.....    | 662   | 244       |
| Oriskany.....      | 906   | 34        |
| Bass Island.....   | 940   | 235       |
| Salina.....        | 1,175 | 457       |

Top of A2—1,515

Top of A1—1,616

|                      |        |     |
|----------------------|--------|-----|
| Guelph-Lockport..... | 1,632  | 275 |
| Rochester.....       | 1,907  | 33  |
| Reynales.....        | 1,940  | 2   |
| Dyer Bay.....        | 1,942  | 5   |
| Cabot Head.....      | 1,947  | 121 |
| Manitoulin.....      | 2,068  | 32  |
| Queenston.....       | 2,100  | 372 |
| Meaford-Dundas.....  | 2,472  | 450 |
| Collingwood.....     | 2,922  | 148 |
| Cobourg.....         | 3,070  | 90  |
| Sherman Fall.....    | 3,160  | 160 |
| Kirkfield.....       | 3,320  | 195 |
| Coboconk.....        | 3,515  | 85  |
| Gull River.....      | 3,600  | 334 |
| Shadow Lake.....     | 3,934  | 6   |
| Cambrian.....        | 3,940  | 8   |
| Trempealeau.....     | 3,948  | 46  |
| Total Depth:         | 3,994' |     |

Geologist: W. E. Koepke.

| Water            | Gas               | Oil                  |
|------------------|-------------------|----------------------|
| Fresh at 186'.   | At 3,951' to      | At 3,963' to 3,966'. |
| Sulphur at 529'. | 3,955' and        |                      |
| Salt at 903' and | 3,963' to 3,966'. |                      |
| 1,669'.          |                   |                      |

## IMPERIAL ENTERPRISES ORFORD 6-A (No. 844)

Orford tp., lot 6, con. A.

Co-ordinates: 1,050' N., 864' E.

Elevation: 633' + 4'.

Driller: Chevalier and Tremblay.

Completed: May 21, 1963.

Result: Abandoned.

Reported Flow: 6 Mcf/d. 1 bbl/d. WHP, N.R. psig.

| Formation          | Top   | Thickness |
|--------------------|-------|-----------|
| Drift.....         | 4     | 72        |
| Kettle Point.....  | 76    | 17        |
| Hamilton.....      | 93    | 237       |
| Dundee.....        | 330   | 145       |
| Columbus.....      | 475   | 23        |
| Detroit River..... | 498   | 193       |
| Bois Blanc.....    | 691   | 239       |
| Bass Island.....   | 930   | 142       |
| Salina.....        | 1,072 | 703       |

Top of A2—1,593

Top of A1—1,710

|                      |        |     |
|----------------------|--------|-----|
| Guelph-Lockport..... | 1,775  | 198 |
| Rochester.....       | 1,973  | 27  |
| Reynales.....        | 2,000  | 3   |
| Grimsby.....         | 2,003  | 7   |
| Cabot Head.....      | 2,010  | 124 |
| Manitoulin.....      | 2,134  | 29  |
| Queenston.....       | 2,163  | 381 |
| Meaford-Dundas.....  | 2,544  | 372 |
| Collingwood.....     | 2,916  | 133 |
| Cobourg.....         | 3,049  | 81  |
| Sherman Fall.....    | 3,130  | 177 |
| Kirkfield.....       | 3,307  | 196 |
| Coboconk.....        | 3,503  | 87  |
| Gull River.....      | 3,590  | 338 |
| Shadow Lake.....     | 3,928  | 6   |
| Cambrian.....        | 3,934  | 10  |
| Trempealeau.....     | 3,944  | 35  |
| Precambrian.....     | 3,479  | 13  |
| Total Depth:         | 3,992' |     |

Geologist: W. E. Koepke.

| Water                              | Gas                  | Oil                  |
|------------------------------------|----------------------|----------------------|
| Fresh at 64'.                      | At 3,941' to 3,963'. | At 3,936' to 3,939'. |
| Sulphur at 776' and 796'.          |                      |                      |
| Salt at 3,936', 3,960' and 3,980'. |                      |                      |

IMPERIAL OIL No. 845

Orford tp., lot 55, N.T.R.

Co-ordinates: 2,183' N., 573' W.  
Elevation: 655' + 4'.  
Driller: L. O. Patterson.  
Completed: June 10, 1963.  
Result: Oil Producer.  
Reported Flow: 175 Mcf/d. 24 bbl/d. A.F. WHP, 1,000 psig.

| Formation          | Top   | Thickness |
|--------------------|-------|-----------|
| Drift.....         | 4     | 164       |
| Hamilton.....      | 168   | 162       |
| Delaware.....      | 330   | 165       |
| Columbus.....      | 495   | 43        |
| Detroit River..... | 538   | 87        |
| Bois Blanc.....    | 625   | 143       |
| Oriskany.....      | 768   | 122       |
| Bass Island.....   | 890   | 246       |
| Salina.....        | 1,136 | 472       |

Top of A2—1,492  
Top of A1—1,573

|                      |         |     |
|----------------------|---------|-----|
| Guelph-Lockport..... | 1,608   | 268 |
| Rochester.....       | 1,876   | 40  |
| Reynales.....        | 1,916   | 3   |
| Cabot Head.....      | 1,919   | 117 |
| Manitoulin.....      | 2,036   | 34  |
| Queenston.....       | 2,070   | 390 |
| Meaford-Dundas.....  | 2,460   | 457 |
| Collingwood.....     | 2,917   | 147 |
| Cobourg.....         | 3,064   | 110 |
| Sherman Fall.....    | 3,174   | 134 |
| Kirkfield.....       | 3,308   | 200 |
| Coboconk.....        | 3,508   | 84  |
| Gull River.....      | 3,592   | 342 |
| Shadow Lake.....     | 3,934   | 7   |
| Cambrian.....        | 3,941   | 4   |
| Trempealeau.....     | 3,945   | 55  |
| Total Depth:         | 4,000'. |     |

Geologist: W. E. Koepke.

| Water                     | Gas                  | Oil                  |
|---------------------------|----------------------|----------------------|
| Fresh at 125'.            | Show at 855'.        | At 3,950' to 3,957'. |
| Sulphur at 490' and 793'. | At 1,621' to 1,627'. |                      |

IMPERIAL OIL No. 846

Orford tp., lot 54, con. N.T.R.

Co-ordinates: 1,045' N., 113' E.  
Elevation: 650' + 4'.  
Driller: W. Shaw.  
Completed: May 23, 1963.  
Result: Water Disposal Well.

| Formation          | Top   | Thickness |
|--------------------|-------|-----------|
| Drift.....         | 4     | 160       |
| Hamilton.....      | 164   | 177       |
| Delaware.....      | 341   | 164       |
| Columbus.....      | 505   | 21        |
| Detroit River..... | 526   | 104       |
| Bois Blanc.....    | 630   | 250       |
| Oriskany.....      | 880   | 25        |
| Bass Island.....   | 905   | 45        |
| Total Depth:       | 950'. |           |

Geologist: W. E. Koepke.

| Water                    |
|--------------------------|
| Sulphur at 510' and 895' |

IMPERIAL OIL No. 848-CLEARVILLE No. 10

Orford tp., lot 54, con. N.T.R.

Co-ordinates: 4,484' N. along W.L.L., 566' E.  
Elevation: 662' + 4'.  
Driller: W. Shaw.  
Completed: July 26, 1963.  
Result: Oil Producer.  
Reported Flow: 115 bbl/d.

| Formation          | Top   | Thickness |
|--------------------|-------|-----------|
| Drift.....         | 4     | 211       |
| Hamilton.....      | 215   | 123       |
| Dundee.....        | 338   | 162       |
| Columbus.....      | 500   | 45        |
| Detroit River..... | 545   | 104       |
| Bois Blanc.....    | 649   | 113       |
| Oriskany.....      | 762   | 150       |
| Bass Island.....   | 912   | 258       |
| Salina.....        | 1,170 | 462       |

Top of A2—1,514  
Top of A1—1,610

|                      |         |     |
|----------------------|---------|-----|
| Guelph-Lockport..... | 1,632   | 254 |
| Rochester.....       | 1,886   | 37  |
| Reynales.....        | 1,923   | 4   |
| Cabot Head.....      | 1,927   | 125 |
| Manitoulin.....      | 2,052   | 27  |
| Queenston.....       | 2,079   | 391 |
| Meaford-Dundas.....  | 2,470   | 465 |
| Collingwood.....     | 2,935   | 138 |
| Cobourg.....         | 3,073   | 3   |
| Sherman Fall.....    | 3,076   | 142 |
| Kirkfield.....       | 3,218   | 297 |
| Coboconk.....        | 3,515   | 89  |
| Gull River.....      | 3,604   | 334 |
| Shadow Lake.....     | 3,938   | 5   |
| Cambrian.....        | 3,943   | 7   |
| Trempealeau.....     | 3,950   | 41  |
| Total Depth:         | 3,991'. |     |

Geologist: W. E. Koepke.

| Water            | Gas                       | Oil                  |
|------------------|---------------------------|----------------------|
| Fresh at 160'.   | Show at 1,514' to 1,522'. | At 3,954' to 3,960'. |
| Sulphur at 763'. |                           |                      |

IMPERIAL OIL No. 856-ORFORD 4-55 N.T.R.  
Orford tp., lot 55, con. N.T.R.

Co-ordinates: 3,847' N. along E.L.L., 573' W.  
Elevation: 658' + 4'.  
Driller: W. Shaw.  
Completed: October 6, 1963.  
Result: Oil Producer.  
Reported Flow: 50 bbl/d. A.F. WHP, 725 psig.

| Formation            | Top    | Thickness |
|----------------------|--------|-----------|
| Drift.....           | 4      | 181       |
| Hamilton.....        | 185    | 149       |
| Dundee.....          | 334    | 168       |
| Columbus.....        | 502    | 38        |
| Detroit River.....   | 540    | 86        |
| Bois Blanc.....      | 626    | 119       |
| Oriskany.....        | 745    | 116       |
| Bass Island.....     | 861    | 306       |
| Salina.....          | 1,167  | 461       |
| Top of A2—1,512      |        |           |
| Top of A1—1,600      |        |           |
| Guelph-Lockport..... | 1,628  | 264       |
| Rochester.....       | 1,892  | 38        |
| Reynales.....        | trace  |           |
| Cabot Head.....      | 1,930  | 110       |
| Manitoulin.....      | 2,040  | 42        |
| Queenston.....       | 2,082  | 389       |
| Meaford-Dundas.....  | 2,471  | 457       |
| Collingwood.....     | 2,928  | 142       |
| Cobourg.....         | 3,070  | 98        |
| Sherman Fall.....    | 3,168  | 148       |
| Kirkfield.....       | 3,316  | 198       |
| Coboconk.....        | 3,514  | 86        |
| Gull River.....      | 3,600  | 336       |
| Shadow Lake.....     | 3,936  | 5         |
| Cambrian.....        | 3,941  | 7         |
| Trempealeau.....     | 3,948  | 44        |
| Total Depth:         | 3,992' |           |

Geologist: W. E. Koepke.

| Water            | Oil                     |
|------------------|-------------------------|
| Fresh at 170'.   | At 3,952' to 3,961' and |
| Sulphur at 745'. | 3,965' to 3,967'.       |

LYNWOOD SECURITIES No. 1  
Orford tp., lot 60, con. S.T.R.

Co-ordinates: 4,275' S. along E.L.L., 210' W.  
Elevation: 639' + 4'.  
Driller: Mandley Drilling Contractors, Ltd.  
Completed: April 3, 1963.  
Result: Abandoned.

| Formation            | Top    | Thickness |
|----------------------|--------|-----------|
| Drift.....           | 4      | 108       |
| Hamilton.....        | 112    | 296       |
| Dundee.....          | 408    | 168       |
| Columbus.....        | 576    | 42        |
| Detroit River.....   | 618    | 92        |
| Bois Blanc.....      | 710    | 542       |
| Bass Island.....     | 910    | 342       |
| Salina.....          | 1,252  | 518       |
| Top of A2—1,655      |        |           |
| Top of A1—1,746      |        |           |
| Guelph-Lockport..... | 1,770  | 255       |
| Rochester.....       | 2,025  | 24        |
| Reynales.....        | 2,049  | 2         |
| Dyer Bay.....        | 2,051  | 11        |
| Cabot Head.....      | 2,062  | 113       |
| Manitoulin.....      | 2,175  | 43        |
| Queenston.....       | 2,218  | 390       |
| Meaford-Dundas.....  | 2,608  | 422       |
| Collingwood.....     | 3,030  | 179       |
| Cobourg.....         | 3,209  | 86        |
| Sherman Fall.....    | 3,295  | 153       |
| Kirkfield.....       | 3,448  | 202       |
| Coboconk.....        | 3,650  | 90        |
| Gull River.....      | 3,740  | 324       |
| Shadow Lake.....     | 4,064  | 5         |
| Cambrian.....        | 4,069  | 13        |
| Trempealeau.....     | 4,082  | 48        |
| Total Depth:         | 4,130' |           |

Geologist: W. E. Koepke.

| Water                       | Oil                       |
|-----------------------------|---------------------------|
| Fresh at 137' and 165'.     | Show at 4,005' and 4,082' |
| Salt at 600', 820', 1,128', | to 4,086'.                |
| and 4,086'.                 |                           |

ROTH AND ROTH LTD. No. 24  
Orford tp., lot 16, con. IV.

Co-ordinates: 1,207' N., 90' W.  
Elevation: 690' + 1'.  
Driller: S. Earl.  
Completed: November 15, 1963.  
Result: Abandoned.

| Formation    | Top  | Thickness |
|--------------|------|-----------|
| Drift.....   | 1    | 433       |
| Total Depth: | 434' |           |

Geologist: Driller's Log.

| Water          |
|----------------|
| Fresh at 157'. |



TOBACCO ROAD OIL No. 5

Orford tp., lot 57, S.T.R.

Co-ordinates: 1,357' S. along W. L.L., 784' E.  
Elevation: 645' + 5'.  
Driller: Stubble and Stubble.  
Completed: February 9, 1963.  
Result: Gas and Oil Producer.  
Reported Flow: 250 Mcf/d. 70 bbl/d. WHP. N.R. psig.

| Formation                           | Top    | Thickness |
|-------------------------------------|--------|-----------|
| Drift.....                          | 5      | 172       |
| Hamilton.....                       | 177    | 157       |
| Dundee.....                         | 334    | 151       |
| Columbus.....                       | 485    | 50        |
| Detroit River.....                  | 535    | 85        |
| Bois Blanc.....                     | 620    | 330       |
| Bass Island.....                    | 950    | 197       |
| Salina.....                         | 1,147  | 463       |
| Top of A2—1,498                     |        |           |
| Top of A1—1,572                     |        |           |
| Guelph-Lockport.....                | 1,610  | 267       |
| Rochester.....                      | 1,877  | 30        |
| Reynales.....                       | 1,907  | 18        |
| Cabot Head.....                     | 1,925  | 90        |
| Manitoulin.....                     | 2,015  | 61        |
| Queenston.....                      | 2,076  | 386       |
| Meaford-Dundas and Collingwood..... | 2,462  | 601       |
| Trenton.....                        | 3,063  | 445       |
| Coboconk and Gull River.....        | 3,508  | 423       |
| Shadow Lake.....                    | 3,931  | 4         |
| Trempealeau.....                    | 3,935  | 22        |
| Total Depth:.....                   | 3,957' |           |

Geologist: B. V. Sanford and W. E. Koepke.

| Water            | Gas                  | Oil                  |
|------------------|----------------------|----------------------|
| Fresh at 151'.   | At 1,598' to 1,615'. | At 3,952' to 3,956'. |
| Sulphur at 751'. |                      |                      |
| Salt at 1,658'.  |                      |                      |

TOBACCO ROAD No. 6

Orford tp., lot 57, con. S.T.R.

Co-ordinates: 2,799' S. along W.L.L., 672' E.  
Elevation: 643' + 4'.  
Driller: Stubble and Stubble.  
Completed: May 24, 1963.  
Result: Oil Producer.  
Reported Flow: 6 Mcf/d. 40 bbl/d. WHP. N.R. psig.

| Formation            | Top    | Thickness |
|----------------------|--------|-----------|
| Drift.....           | 4      | 146       |
| Hamilton.....        | 150    | 210       |
| Dundee.....          | 360    | 164       |
| Columbus.....        | 524    | 10        |
| Detroit River.....   | 534    | 81        |
| Bois Blanc.....      | 615    | 243       |
| Oriskany.....        | 858    | 87        |
| Bass Island.....     | 945    | 255       |
| Salina.....          | 1,200  | 419       |
| Top of A2—1,500      |        |           |
| Top of A1—1,593      |        |           |
| Guelph-Lockport..... | 1,619  | 251       |
| Rochester.....       | 1,870  | 40        |
| Reynales.....        | 1,910  | 2         |
| Dyer Bay.....        | 1,912  | 6         |
| Cabot Head.....      | 1,918  | 112       |
| Manitoulin.....      | 2,030  | 35        |
| Queenston.....       | 2,065  | 391       |
| Meaford-Dundas.....  | 2,456  | 477       |
| Collingwood.....     | 2,933  | 132       |
| Cobourg.....         | 3,065  | 95        |
| Sherman Fall.....    | 3,160  | 140       |
| Kirkfield.....       | 3,300  | 208       |
| Coboconk.....        | 3,508  | 86        |
| Gull River.....      | 3,594  | 338       |
| Shadow Lake.....     | 3,932  | 5         |
| Trempealeau.....     | 3,937  | 18        |
| Total Depth:.....    | 3,955' |           |

Geologist: W. E. Koepke.

| Water                      | Gas                  | Oil                   |
|----------------------------|----------------------|-----------------------|
| Sulphur at 612'.           | At 1,670' to 1,695'. | At 3,472' to 3,487'   |
| Salt at 1,840' and 3,953'. | Show at 3,951'.      | and 3,951' to 3,955'. |

**TOBACCO ROAD No. 7**  
Orford tp., lot 52, con. S.T.R.

Co-ordinates: 355' S., 516' E.  
Elevation: 646' + 4'.  
Driller: Stubble and Stubble.  
Completed: October 26, 1963.  
Result: Oil Producer.  
Reported Flow: 43 Mcf/d, 44 bbl/d. WHP. N.R. psig.

| Formation            | Top   | Thickness |
|----------------------|-------|-----------|
| Drift.....           | 4     | 158       |
| Hamilton.....        | 162   | 213       |
| Dundee.....          | 375   | 165       |
| Columbus.....        | 540   | 62        |
| Detroit River.....   | 602   | 112       |
| Bois Blanc.....      | 714   | 246       |
| Oriskany.....        | 960   | 40        |
| Bass Island.....     | 1,000 | 150       |
| Salina.....          | 1,150 | 465       |
| Top of A2—1,510      |       |           |
| Top of A1—1,588      |       |           |
| Guelph-Lockport..... | 1,615 | 278       |
| Rochester.....       | 1,893 | 33        |
| Dyer Bay.....        | 1,926 | 2         |
| Cabot Head.....      | 1,928 | 122       |
| Manitoulin.....      | 2,050 | 20        |
| Queenston.....       | 2,070 | 393       |
| Meaford-Dundas.....  | 2,463 | 477       |
| Collingwood.....     | 2,940 | 126       |
| Cobourg.....         | 3,066 | 99        |
| Sherman Fall.....    | 3,165 | 147       |
| Kirkfield.....       | 3,312 | 198       |
| Cobocok.....         | 3,510 | 92        |
| Gull River.....      | 3,602 | 330       |
| Shadow Lake.....     | 3,932 | 4         |
| Cambrian.....        | 3,936 | 16        |
| Trempealeau.....     | 3,952 | 10        |
| Total Depth:         |       | 3,962'.   |

Geologist: W. E. Koepke.

| Water                      | Gas        | Oil                  |
|----------------------------|------------|----------------------|
| Fresh at 142'.             | At 3,951'. | At 3,951' to 3,962'. |
| Sulphur at 548'.           |            |                      |
| Salt at 1,670' and 1,875'. |            |                      |

**Lambton County**

**THEDFORD OIL & GAS No. 1**  
Bosanquet tp., lot 22, con. VIII.

Co-ordinates: 400' N., 350' E.  
Elevation: 667' + 1'.  
Driller: H. Brandon.  
Completed: August 15, 1963.  
Result: Abandoned.

| Formation                     | Top   | Thickness |
|-------------------------------|-------|-----------|
| Drift.....                    | 1     | 34        |
| Hamilton.....                 | 35    | 283       |
| Dundee.....                   | 318   | 100       |
| Detroit River.....            | 418   | 370       |
| Bois Blanc.....               | 788   | 200       |
| Bass Island.....              | 988   | 184       |
| Salina.....                   | 1,172 | 1,077     |
| Top of A2—1,892               |       |           |
| Top of A1—2,104               |       |           |
| Guelph-Lockport.....          | 2,249 | 91        |
| Rochester.....                | 2,340 | 56        |
| Irondequoit and Reynales..... | 2,396 | 14        |
| Cabot Head.....               | 2,410 | 22        |
| Total Depth:                  |       | 2,432'.   |

Geologist: W. E. Koepke.

Water  
Fresh at 35'.  
Sulphur at 401'.

**B-A BROOKE 5-XI**

Brooke tp., lot 5, con. XI.

Co-ordinates: 400' S., 400' W.  
Elevation: 695' + 4'.  
Driller: H. W. Meier.  
Completed: August 22, 1963.  
Result: Abandoned

| Formation          | Top   | Thickness |
|--------------------|-------|-----------|
| Drift.....         | 4     | 66        |
| Kettle Point.....  | 70    | 65        |
| Hamilton.....      | 135   | 268       |
| Dundee.....        | 403   | 72        |
| Columbus.....      | 475   | 23        |
| Detroit River..... | 498   | 300       |
| Bois Blanc.....    | 798   | 172       |
| Bass Island.....   | 970   | 132       |
| Salina.....        | 1,102 | 646       |

Top of A2—1,612

Top of A1—1,693

|                      |       |         |
|----------------------|-------|---------|
| Guelph-Lockport..... | 1,748 | 18      |
| Total Depth:         |       | 1,766'. |

Geologist: W. E. Koepke.

| Water                      | Gas                       | Oil                       |
|----------------------------|---------------------------|---------------------------|
| Fresh at 45'.              | Show at 1,693' to 1,700'. | Show at 1,693' to 1,700'. |
| Sulphur at 525'.           |                           |                           |
| Salt at 1,685' and 1,746'. |                           |                           |

**EARL-TOSTIK SYNDICATE No. 1**

Brooke tp., lot 10, con. XIII.

Co-ordinates: 2,183' N., 500' E.  
Elevation: 717' + 2'.  
Driller: S. Earl.  
Completed: August 14, 1963.  
Result: Abandoned.

| Formation          | Top   | Thickness |
|--------------------|-------|-----------|
| Drift.....         | 2     | 56        |
| Kettle Point.....  | 58    | 86        |
| Hamilton.....      | 144   | 264       |
| Dundee.....        | 408   | 110       |
| Detroit River..... | 518   | 262       |
| Bois Blanc.....    | 780   | 188       |
| Bass Island.....   | 968   | 146       |
| Salina.....        | 1,114 | 898       |

Top of A2—1,740

Top of A1—1,920

|                      |       |         |
|----------------------|-------|---------|
| Guelph-Lockport..... | 2,012 | 68      |
| Total Depth:         |       | 2,080'. |

Geologist: W. E. Koepke.

| Water            | Gas                      | Oil  |
|------------------|--------------------------|--|
| Fresh at 61'.    | Show at 2,039 to 2,040'. | Shows at 2,039 to 2,049' and 2,052' to 2,074'. |
| Sulphur at 527'. |                          |  |

EARL-TOSTIK SYNDICATE No. 2

Brooke tp., lot 10, con. XIII.

Co-ordinates: 1246' S., 345' E.  
Elevation: 722' + 1'.  
Driller: S. Earl.  
Completed: December 27, 1963  
Result: Oil Producer.  
Reported Flow: 100 Mcf/d. 150 bbl/d. WHP. N.R. psig.

| Formation            | Top     | Thickness |
|----------------------|---------|-----------|
| Drift.....           | 1       | 55        |
| Kettle Point.....    | 56      | 89        |
| Hamilton.....        | 145     | 265       |
| Dundee.....          | 410     | 86        |
| Detroit River.....   | 496     | 288       |
| Bois Blanc.....      | 784     | 178       |
| Bass Island.....     | 962     | 158       |
| Salina.....          | 1,120   | 848       |
| Top of A2—1,735      |         |           |
| Top of A1—1,900      |         |           |
| Guelph-Lockport..... | 1,968   | 78        |
| Total Depth:.....    | 2,046'. |           |

Geologist: W. E. Koepke.

| Water            | Gas        | Oil                  |
|------------------|------------|----------------------|
| Fresh at 54'.    | At 1,989'  | At 1,960' to 1,968', |
| Sulphur at 510'. | to 1,990'. | 1,990' to 2,008',    |
|                  |            | and 2,009' to        |
|                  |            | 2,038'.              |

B.A. No. 21-DAWN 31-XII

Dawn tp., lot 31, con. XII.

Co-ordinates: 640' N., 500' W.  
Elevation: 671' + 4'.  
Driller: R. L. McPherson.  
Completed: January 26, 1963.  
Result: Abandoned.

| Formation            | Top     | Thickness |
|----------------------|---------|-----------|
| Drift.....           | 4       | 61        |
| Kettle Point.....    | 65      | 55        |
| Hamilton.....        | 120     | 245       |
| Dundee.....          | 365     | 57        |
| Columbus.....        | 422     | 49        |
| Detroit River.....   | 471     | 257       |
| Bois Blanc.....      | 728     | 157       |
| Bass Island.....     | 885     | 140       |
| Salina.....          | 1,025   | 876       |
| Top of A2—1,587      |         |           |
| Top of A1—1,763      |         |           |
| Guelph-Lockport..... | 1,901   | 103       |
| Rochester.....       | 2,004   | 12        |
| Total Depth:.....    | 2,016'. |           |

Geologist: W. E. Koepke.

| Water            | Gas             |
|------------------|-----------------|
| Fresh at 60'.    | Show at 1,567'. |
| Sulphur at 530'. |                 |

ECKFORD AND WHITTY No. 1

Dawn tp., lot 22, con. I.

Co-ordinates: 950' N., 500' W. of c/l.  
Elevation: 624' + 2'.  
Driller: E. M. Stevenson.  
Completed: April 22, 1963.  
Result: Oil Producer, abandoned.  
Reported Flow: 50 Mcf/d. 6 bbl/d. WHP. N.R. psig.

| Formation            | Top     | Thickness |
|----------------------|---------|-----------|
| Drift.....           | 2       | 62        |
| Kettle Point.....    | 64      | 248       |
| Hamilton.....        | 312     | 285       |
| Delaware.....        | 597     | 88        |
| Detroit River.....   | 685     | 293       |
| Bois Blanc.....      | 978     | 112       |
| Bass Island.....     | 1,090   | 137       |
| Salina.....          | 1,227   | 683       |
| Top of A2—1,620      |         |           |
| Top of A1—1,808      |         |           |
| Guelph-Lockport..... | 1,910   | 39        |
| Total Depth:.....    | 1,949'. |           |

Geologist: W. E. Koepke.

| Water           | Gas         | Oil               |
|-----------------|-------------|-------------------|
| Fresh at 60'.   | At 1,910 to | At 1,800' to      |
| Sulphur at 710' | 1,935'.     | 1,816' and        |
| and 750'.       |             | 1,935' to 1,942'. |

ECKFORD AND WHITTY No. 2

Dawn tp., lot 22, con. I.

Co-ordinates: 509' N., 763' E.  
Elevation: 623' + 2'.  
Driller: M. Stevenson.  
Completed: June 15, 1963.  
Result: Gas and Oil Producer.  
Reported Flow: 55 Mcf/d. 20 bbl/d. WHP. 730 psig.

| Formation              | Top     | Thickness |
|------------------------|---------|-----------|
| Drift.....             | 2       | 61        |
| Kettle Point.....      | 63      | 269       |
| Hamilton.....          | 332     | 286       |
| Delaware.....          | 618     | 87        |
| Detroit River.....     | 705     | 293       |
| Bois Blanc.....        | 998     | 137       |
| Bass Island.....       | 1,135   | 133       |
| Salina.....            | 1,268   | 655       |
| Top of A2—1,615        |         |           |
| Top of A1—1,808        |         |           |
| Guelph-Lockport.....   | 1,923   | 32        |
| Total Depth:.....      | 1,955'. |           |
| P.B. Total Depth:..... | 1,947'. |           |

Geologist: W. E. Koepke.

| Water            | Gas                 | Oil          |
|------------------|---------------------|--------------|
| Fresh at 63'.    | At 1,625' to 1,630' | At 1,933' to |
| Sulphur at 732'. | and 1,926' to       | 1,941'.      |
|                  | 1,933'.             |              |

## ECKFORD AND WHITTY No. 3

Dawn tp., lot 22, con. I.

Co-ordinates: 1,500' N., 550' E.  
 Elevation: 623' + 3'.  
 Driller: W. R. Kiser.  
 Completed: August 23, 1963.  
 Result: Gas and Oil Producer.  
 Reported Flow: 42 Mcf/d. 23 bbl/d. WHP, 800 psig.

| Formation          | Top   | Thickness |
|--------------------|-------|-----------|
| Drift.....         | 3     | 59        |
| Kettle Point.....  | 62    | 264       |
| Hamilton.....      | 326   | 256       |
| Dundee.....        | 582   | 98        |
| Detroit River..... | 680   | 268       |
| Bois Blanc.....    | 948   | 126       |
| Bass Island.....   | 1,074 | 128       |
| Salina.....        | 1,202 | 739       |

Top of A2—1,630

Top of A1—1,818

|                      |        |    |
|----------------------|--------|----|
| Guelph-Lockport..... | 1,941  | 16 |
| Total Depth:.....    | 1,957' |    |

Geologist: W. E. Koepke.

| Water            | Gas                 | Oil                                       |
|------------------|---------------------|---|
| Sulphur at 690', | At 1,953' to 1,957' | At 1,949' to 1,953' and 1,953' to 1,957'. |

## ECKFORD AND WHITTY No. 7

Dawn tp., lot 22, con. I

Co-ordinates: 500' N., 1,700' E.  
 Elevation: 624' + 3'.  
 Driller: Rawlings Drilling Co., Ltd.  
 Completed: December 11, 1963.  
 Result: Abandoned.

| Formation          | Top   | Thickness |
|--------------------|-------|-----------|
| Drift.....         | 3     | 62        |
| Kettle Point.....  | 65    | 265       |
| Hamilton.....      | 330   | 270       |
| Dundee.....        | 600   | 80        |
| Detroit River..... | 680   | 303       |
| Bois Blanc.....    | 983   | 145       |
| Bass Island.....   | 1,128 | 120       |
| Salina.....        | 1,248 | 660       |

Top of A2—1,605

Top of A1—1,790

|                      |        |    |
|----------------------|--------|----|
| Guelph-Lockport..... | 1,908  | 57 |
| Total Depth:.....    | 1,965' |    |

Geologist: W. E. Koepke.

| Water                                      | Gas                       | Oil                       |
|--|---------------------------|---------------------------|
| Fresh at 60'.<br>Sulphur at 645' and 744'. | Show at 1,910' to 1,924'. | Show at 1,924' to 1,938'. |

## ECKFORD AND WHITTY No. 6

Dawn tp., lot 22, con. I.

Co-ordinates: 1,500' N., 1,650' E.  
 Elevation: 623' + 4'.  
 Driller: Rawlings Drilling Co., Ltd.  
 Completed: November 12, 1963.  
 Result: Gas and Oil Producer.  
 Reported Flow: 40 Mcf/d. 2 bbl/d. WHP, N.R. psig.

| Formation          | Top   | Thickness |
|--------------------|-------|-----------|
| Drift.....         | 4     | 60        |
| Kettle Point.....  | 64    | 266       |
| Hamilton.....      | 330   | 260       |
| Dundee.....        | 590   | 54        |
| Detroit River..... | 644   | 300       |
| Bois Blanc.....    | 944   | 126       |
| Bass Island.....   | 1,070 | 142       |
| Salina.....        | 1,212 | 706       |

Top of A2—1,616

Top of A1—1,812

|                      |        |    |
|----------------------|--------|----|
| Guelph-Lockport..... | 1,918  | 46 |
| Total Depth:.....    | 1,964' |    |

Geologist: W. E. Koepke.

| Water   | Gas  | Oil                  |
|---|--|----------------------|
| Fresh at 64'.<br>Sulphur at 697', 785', and 1,170'. | Show at 1,908' to 1,912' and 1,928' to 1,934'.<br>At 1,934' to 1,937'. | At 1,940' to 1,955'. |

## FILTON REALTY No. 1

Dawn tp., lot 27, con. XIV.

Co-ordinates: 250' N. of c/1, 250' E.  
 Elevation:  
 Driller: W. Marsh.  
 Completed: November 26, 1963.  
 Result: Abandoned.

| Formation          | Top | Thickness |
|--------------------|-----|-----------|
| Drift.....         | 0   | 53        |
| Kettle Point.....  | 53  | 70        |
| Hamilton.....      | 123 | 228       |
| Dundee.....        | 351 | 102       |
| Detroit River..... | 453 | 225       |
| Bois Blanc.....    | 678 | 182       |
| Bass Island.....   | 860 | 136       |
| Salina.....        | 996 | 839       |

Top of A2—1,544

Top of A1—1,694

|                      |        |     |
|----------------------|--------|-----|
| Guelph-Lockport..... | 1,835  | 115 |
| Total Depth:.....    | 1,950' |     |

Deepening-Original T.D. 453'—drilled in 1960.

Geologist: W. E. Koepke.

| Water  | Gas                       | Oil                                |
|--|---------------------------|------------------------------------|
| Fresh at 52'.<br>Sulphur at 453' and 750'.<br>Salt at 1,733', 1,841' and 1,935'. | Show at 1,725' to 1,733'. | Show at 364' and 1,693' to 1,711'. |

IMPERIAL OIL ENTERPRISES DAWN 32-XII (866)  
Dawn tp., lot 32, con. XII.

Co-ordinates: 500' N., 1,650' W.  
Elevation: 671' + 4'.  
Driller: W. R. Kiser.  
Completed: December 23, 1964.  
Result: Abandoned.

| Formation            | Top    | Thickness |
|----------------------|--------|-----------|
| Drift.....           | 4      | 61        |
| Kettle Point.....    | 65     | 63        |
| Hamilton.....        | 128    | 250       |
| Dundee.....          | 378    | 77        |
| Columbus.....        | 455    | 21        |
| Detroit River.....   | 476    | 268       |
| Bois Blanc.....      | 744    | 171       |
| Bass Island.....     | 915    | 127       |
| Salina.....          | 1,042  | 866       |
| Top of A2—1,582      |        |           |
| Top of A1—1,770      |        |           |
| Guelph-Lockport..... | 1,908  | 101       |
| Rochester.....       | 2,009  | 26        |
| Total Depth:.....    | 2,035' |           |

Geologist: W. E. Koepke.  
Water  
Fresh at 65'.  
Sulphur at 519'.  
Salt at 1,955'.

PLACE-DAWN BURNS No. 1  
Dawn tp., lot 16, con. VI.

Co-ordinates: 496' S., 548' E.  
Elevation: 627' + 2'.  
Driller: I. Smelser.  
Completed: February 18, 1963.  
Result: Abandoned.

| Formation         | Top  | Thickness |
|-------------------|------|-----------|
| Drift.....        | 2    | 50        |
| Kettle Point..... | 52   | 135       |
| Hamilton.....     | 187  | 24        |
| Total Depth:..... | 211' |           |

Geologist: W. E. Koepke.  
Water  
Fresh at 48'.

PLACE-DAWN BURNS No. 1-A  
Dawn tp., lot 16, con. VI.

Co-ordinates: 548' S., 487' E.  
Elevation: 627' + 2'.  
Driller: I. Smelser.  
Completed: March 25, 1963.  
Result: Abandoned.

| Formation            | Top    | Thickness |
|----------------------|--------|-----------|
| Drift.....           | 2      | 50        |
| Kettle Point.....    | 52     | 135       |
| Hamilton.....        | 187    | 209       |
| Delaware.....        | 396    | 113       |
| Detroit River.....   | 509    | 247       |
| Bois Blanc.....      | 756    | 136       |
| Bass Island.....     | 892    | 130       |
| Salina.....          | 1,022  | 834       |
| Top of A2—1,564      |        |           |
| Top of A1—1,728      |        |           |
| Guelph-Lockport..... | 1,856  | 110       |
| Rochester.....       | 1,966  | 17        |
| Total Depth:.....    | 1,983' |           |

Geologist: W. E. Koepke.  
Water  
Fresh at 48' and 236'.  
Sulphur at 450' and 932'.  
Salt at 1,729'.  
Gas  
Show at 236'.

SALINA-TAMARCK No. 2  
Dawn tp., lot 30, con. VI.

Co-ordinates: 500' N., 600' E.  
Elevation: 655' + 3'.  
Driller: Mandley Drilling Contractors, Ltd.  
Completed: January 28, 1963.  
Result: Abandoned.

| Formation            | Top    | Thickness |
|----------------------|--------|-----------|
| Drift.....           | 3      | 69        |
| Kettle Point.....    | 72     | 40        |
| Hamilton.....        | 112    | 250       |
| Dundee.....          | 362    | 75        |
| Columbus.....        | 437    | 31        |
| Detroit River.....   | 468    | 290       |
| Bois Blanc.....      | 758    | 131       |
| Bass Island.....     | 889    | 153       |
| Salina.....          | 1,042  | 883       |
| Top of A2—1,598      |        |           |
| Top of A1—1,790      |        |           |
| Guelph-Lockport..... | 1,925  | 126       |
| Total Depth:.....    | 2,051' |           |

Geologist: W. E. Koepke.  
Water  
Sulphur at 490'.

SALINA-No. 7  
Dawn tp., lot 21, con. I.

Co-ordinates: 500' N., 650' W.  
Elevation: 624' + 3'.  
Driller: Rawlings Drilling Co., Ltd.  
Completed: July 26, 1963.  
Result: Abandoned.

| Formation            | Top    | Thickness |
|----------------------|--------|-----------|
| Drift.....           | 3      | 64        |
| Kettle Point.....    | 67     | 231       |
| Hamilton.....        | 298    | 228       |
| Delaware.....        | 526    | 102       |
| Columbus.....        | 628    | 10        |
| Detroit River.....   | 638    | 262       |
| Bois Blanc.....      | 900    | 245       |
| Bass Island.....     | 1,145  | 131       |
| Salina.....          | 1,276  | 654       |
| Top of A2—1,630      |        |           |
| Top of A1—1,785      |        |           |
| Guelph-Lockport..... | 1,930  | 107       |
| Rochester.....       | 2,037  | 5         |
| Total Depth:.....    | 2,042' |           |

Geologist: W. E. Koepke.  
Water  
Fresh at 140'.  
Sulphur at 645'.  
Gas  
Show at 1,650'.

BRENNAN-SAROLINE No. 9  
Enniskillen tp., lot 12, con. XII.

Co-ordinates: 1,965' S., 15' E.  
Elevation:  
Driller: Wellington Newport.  
Completed: September 3, 1963.  
Result: Oil Producer.  
Reported Flow: 2 bbl/d.

| Formation          | Top  | Thickness |
|--------------------|------|-----------|
| Drift.....         | 1    | 98        |
| Hamilton.....      | 99   | 223       |
| Dundee.....        | 322  | 118       |
| Detroit River..... | 440  | 40        |
| Total Depth:.....  | 480' |           |

Geologist: W. E. Koepke.  
Water  
Fresh at 130'.  
Oil  
Show at 130' to 135'.  
At 450'.

**B. A.-ENNISKILLEN 28-XIII**  
Enniskillen tp., lot 28, con. XIII.

Co-ordinates: 1,730' N., 570' E.  
Elevation: 687' + 3'.  
Driller: R. L. McPherson.  
Completed: September 13, 1963.  
Result: Abandoned.

| Formation            | Top   | Thickness |
|----------------------|-------|-----------|
| Drift.....           | 3     | 66        |
| Kettle Point.....    | 69    | 63        |
| Hamilton.....        | 132   | 275       |
| Dundee.....          | 407   | 108       |
| Detroit River.....   | 515   | 285       |
| Bois Blanc.....      | 800   | 190       |
| Bass Island.....     | 990   | 148       |
| Salina.....          | 1,138 | 1,037     |
| Top of A2—1,806      |       |           |
| Top of A1—2,036      |       |           |
| Guelph-Lockport..... | 2,175 | 81        |
| Rochester.....       | 2,256 | 14        |
| Total Depth.....     |       | 2,270'.   |

Geologist: W. E. Koepke.

Water

Fresh at 63'.

Sulphur at 537'.

Salt at 2,250'.

**IMPERIAL No. 838**  
Enniskillen tp., lot 18, con. II.

Co-ordinates: 2,354' N., 664' E.  
Elevation: 659' + 1'.  
Driller: L. O. Patterson.  
Completed: February 3, 1963.  
Result: Core Test. (Well transferred to land-owner.)

| Formation          | Top | Thickness |
|--------------------|-----|-----------|
| Drift.....         | 1   | 69        |
| Hamilton.....      | 70  | 150       |
| Dundee.....        | 220 | 84        |
| Detroit River..... | 304 | 96        |
| Total Depth.....   |     | 400'.     |

Geologist: Jack V. Hill.

Water

Salt at 245'.

Oil

Show at 245' to 250'.

**UNION-ENNISKILLEN 6-V**  
Enniskillen tp., lot 6, con. V.

Co-ordinates: 1,300' N. of Rd., 800' E.  
Elevation: 649' + 2'.  
Driller: E. M. Stevenson.  
Completed: August 24, 1963.  
Result: Abandoned.

| Formation            | Top   | Thickness |
|----------------------|-------|-----------|
| Drift.....           | 2     | 163       |
| Kettle Point.....    | 165   | 87        |
| Hamilton.....        | 252   | 254       |
| Delaware.....        | 506   | 99        |
| Columbus.....        | 605   | 23        |
| Detroit River.....   | 628   | 290       |
| Bois Blanc.....      | 918   | 176       |
| Bass Island.....     | 1,094 | 152       |
| Salina.....          | 1,246 | 875       |
| Top of A2—1,758      |       |           |
| Top of A1—1,982      |       |           |
| Guelph-Lockport..... | 2,121 | 87        |
| Rochester.....       | 2,208 | 37        |
| Total Depth.....     |       | 2,245'.   |

Geologist: W. E. Koepke.

Water

Fresh at 95' and 170'.

Sulphur at 625'.

Salt at 2,160'.

**PERUVIAN OILS AND MINERALS No. 1**  
Euphemia tp., lot 27, con. III.

Co-ordinates: 1,759' S., 718' W.  
Elevation: 657' + 1'.  
Driller: J. Nemec.  
Completed: December 4, 1963.  
Result: Abandoned.

| Formation         | Top | Thickness |
|-------------------|-----|-----------|
| Drift.....        | 1   | 40        |
| Kettle Point..... | 41  | 32        |
| Hamilton.....     | 73  | 233       |
| Dundee.....       | 306 | 76        |
| Columbus.....     | 382 | 20        |
| Total Depth.....  |     | 402'.     |

Geologist: W. E. Koepke.

Water

Fresh at 41'.

Salt at 398'.

Oil

Show at 324' to 330'.

**PERUVIAN OILS AND MINERALS No. 2**  
Euphemia tp., lot 28, con. IV.

Co-ordinates: 380' N., 320' W. of River Rd.  
Elevation: 671' + 1'.  
Driller: J. Nemec.  
Completed: December 23, 1963.  
Result: Oil Producer.  
Reported Flow: 20 bbl/d.

| Formation         | Top | Thickness |
|-------------------|-----|-----------|
| Drift.....        | 1   | 31        |
| Kettle Point..... | 32  | 232       |
| Hamilton.....     | 264 | 82        |
| Dundee.....       | 346 | 32        |
| Total Depth.....  |     | 378'.     |

Geologist: W. E. Koepke.

Water

Fresh at 32'.

Salt at 375'.

Oil

At 346' to 350' and

353' to 357'.

**B.P. TRIAD-IMP. MOORE 10-IX (4)**  
Moore tp., lot 10, con. IX.

Co-ordinates: 1,850' N., 680' W.,  
Elevation: 652' + 2'.  
Driller: H. W. Meier.  
Completed: April 1, 1963.  
Result: Abandoned.

| Formation            | Top   | Thickness |
|----------------------|-------|-----------|
| Drift.....           | 2     | 123       |
| Kettle Point.....    | 125   | 61        |
| Hamilton.....        | 186   | 272       |
| Delaware.....        | 458   | 100       |
| Detroit River.....   | 558   | 422       |
| Bois Blanc.....      | 980   | 115       |
| Bass Island.....     | 1,095 | 145       |
| Salina.....          | 1,240 | 1,165     |
| Top of A2—2,002      |       |           |
| Top of A1—2,257      |       |           |
| Guelph-Lockport..... | 2,405 | 98        |
| Rochester.....       | 2,503 | 10        |
| Total Depth.....     |       | 2,513'.   |

Geologist: W. E. Koepke.

Water

Sulphur at 550'.

Oil

Show at 2,411' to 2,429'.

B.P. TRIAD MOORE 24-I (7)  
Moore tp., lot 24, con. I.

Co-ordinates: 900' S., 330' E.  
Elevation: 609' + 3'.  
Driller: Demaray and Nichols.  
Completed: September 13, 1963.  
Result: Abandoned.

| Formation            | Top    | Thickness |
|----------------------|--------|-----------|
| Drift.....           | 3      | 147       |
| Port Lambton.....    | 150    | 52        |
| Kettle Point.....    | 202    | 238       |
| Hamilton.....        | 440    | 241       |
| Dundee.....          | 681    | 101       |
| Detroit River.....   | 782    | 283       |
| Bois Blanc.....      | 1,065  | 165       |
| Bass Island.....     | 1,230  | 115       |
| Salina.....          | 1,345  | 1,032     |
| Top of A2—2,010      |        |           |
| Top of A1—2,240      |        |           |
| Guelph-Lockport..... | 2,377  | 106       |
| Rochester.....       | 2,483  | 21        |
| Reynales.....        | 2,504  | 3         |
| Total Depth.....     | 2,507' |           |

Geologist: W. E. Koepke.  
Water  
Sulphur at 495' and 790'.

B.P. TRIAD MOORE 24-V (8)  
Moore tp., lot 24, con. V.

Co-ordinates: 1,600' N., 600' E.  
Elevation: 625' + 3'.  
Driller: Demaray and Nichols.  
Completed: November 8, 1963.  
Result: Abandoned.

| Formation            | Top    | Thickness |
|----------------------|--------|-----------|
| Drift.....           | 3      | 147       |
| Port Lambton.....    | 150    | 150       |
| Kettle Point.....    | 300    | 172       |
| Hamilton.....        | 472    | 256       |
| Dundee.....          | 728    | 100       |
| Detroit River.....   | 828    | 290       |
| Bois Blanc.....      | 1,118  | 172       |
| Bass Island.....     | 1,290  | 140       |
| Salina.....          | 1,430  | 1,042     |
| Top of A2—2,083      |        |           |
| Top of A1—2,326      |        |           |
| Guelph-Lockport..... | 2,472  | 116       |
| Rochester.....       | 2,588  | 14        |
| Total Depth.....     | 2,602' |           |

Geologist: W. E. Koepke.  
Water  
Sulphur at 830'.

CANADIAN DELHI-MOORE 25-X (26)  
Moore tp., lot 25, con. X.

Co-ordinates: 400' N., 713' E.  
Elevation: 637' + 3'.  
Driller: Chevalier & Tremblay.  
Completed: September 18, 1963.  
Result: Abandoned.

| Formation          | Top    | Thickness |
|--------------------|--------|-----------|
| Drift.....         | 3      | 142       |
| Kettle Point.....  | 145    | 179       |
| Hamilton.....      | 324    | 271       |
| Dundee.....        | 595    | 105       |
| Detroit River..... | 700    | 312       |
| Bois Blanc.....    | 1,012  | 188       |
| Bass Island.....   | 1,200  | 155       |
| Salina.....        | 1,355  | 1,029     |
| Top of A2—2,124    |        |           |
| Total Depth.....   | 2,384' |           |

Geologist: W. E. Koepke.  
Water  
Sulphur at 670'.  
Salt at 2,384'.

CANADIAN DELHI-MOORE 5-XII (25)  
Moore tp., lot 5, con. XII.

Co-ordinates: 1,500' S., 792' E.  
Elevation: 745' + 3'.  
Driller: Chevalier & Tremblay.  
Completed: August 8, 1963.  
Result: Abandoned.

| Formation            | Top    | Thickness |
|----------------------|--------|-----------|
| Drift.....           | 3      | 145       |
| Hamilton.....        | 148    | 250       |
| Dundee.....          | 398    | 100       |
| Detroit River.....   | 498    | 217       |
| Bois Blanc.....      | 815    | 160       |
| Bass Island.....     | 975    | 195       |
| Salina.....          | 1,170  | 1,262     |
| Top of A2—2,025      |        |           |
| Top of A1—2,294      |        |           |
| Guelph-Lockport..... | 2,432  | 84        |
| Rochester.....       | 2,516  | 24        |
| Total Depth.....     | 2,540' |           |

Geologist: W. E. Koepke.  
Water Gas Oil  
Fresh at 144'. Show at 918 to Show at 499' and  
Sulphur at 526'. 922'. 516' to 526'.  
Salt at 1,274'.

CANADIAN DELHI-MOORE 13-II (28)  
Moore tp., lot 13, con. II.

Co-ordinates: 1400' N., 600' E.  
Elevation: 619' + 3'.  
Driller: Chevalier & Tremblay.  
Completed: November 7, 1963.  
Result: Abandoned.

| Formation            | Top    | Thickness |
|----------------------|--------|-----------|
| Drift.....           | 3      | 122       |
| Kettle Point.....    | 125    | 200       |
| Hamilton.....        | 325    | 245       |
| Dundee.....          | 570    | 100       |
| Detroit River.....   | 670    | 280       |
| Bois Blanc.....      | 950    | 172       |
| Bass Island.....     | 1,122  | 128       |
| Salina.....          | 1,250  | 996       |
| Top of A2—1,880      |        |           |
| Top of A1—2,112      |        |           |
| Guelph-Lockport..... | 2,246  | 104       |
| Reynales.....        | 2,350  | 15        |
| Total Depth.....     | 2,365' |           |

Geologist: W. E. Koepke.  
Water Fresh at 122'. Sulphur at 675' and 765'.

CANADIAN DELHI No. 29 - BRIGDEN No. 1  
Moore tp., lot 10, con. IV.

Co-ordinates: 355' S., 364' W.  
Elevation: 602' + 3'.  
Driller: Chevalier & Tremblay.  
Completed: December 23, 1963.  
Result: Oil Producer.  
Reported Flow: 30 bbl/d. WHP. 700 psig.

| Formation            | Top    | Thickness |
|----------------------|--------|-----------|
| Drift.....           | 3      | 85        |
| Kettle Point.....    | 88     | 80        |
| Hamilton.....        | 168    | 276       |
| Dundee.....          | 444    | 106       |
| Detroit River.....   | 550    | 316       |
| Bois Blanc.....      | 866    | 204       |
| Bass Island.....     | 1,070  | 144       |
| Salina.....          | 1,214  | 1,016     |
| Top of A2—1,865      |        |           |
| Top of A1—2,100      |        |           |
| Guelph-Lockport..... | 2,230  | 102       |
| Rochester.....       | 2,332  | 3         |
| Total Depth.....     | 2,335' |           |

Discovery Well.  
Geologist: W. E. Koepke.  
Water Gas Oil  
Sulphur at 492'. Show at 166' to At 2,096' to 2,098',  
840' and 1,124'. 169'. 2,108' to 2,120' and  
Salt at 2,273'. 2,230' to 2,248'.

## IMPERIAL SECKERTON No. 3 (358)

Moore tp., lot 20, con. IX

Co-ordinates: 1,800' S., 800' E.

Elevation: 650' + 4'.

Driller: R. L. McPherson.

Completed: September 25, 1963.

Result: Gas Producer (Unchanged)—Deepening abandoned.

Previously drilled (1952) to depth of 2,387' from Elevation 650' + 3'.

| Formation                     | Top     | Thickness |
|-------------------------------|---------|-----------|
| Salina (1952).....            | 1,325   | 1,062     |
| DEEPENING                     |         |           |
| Salina (continued, 1963)..... | 2,387+1 | 94        |
| Guelph.....                   | 2,482   | 49        |
| Total Depth:.....             | 2,531'  |           |
| Plugged back Total Depth:..   | 2,378'  |           |

Geologist: W. E. Koepke.

## IMPERIAL SECKERTON No. 4 (361)

Moore tp., lot 21, con. VIII.

Co-ordinates: 450' S., 891' E.

Elevation: 650' + 4'.

Driller: Stubble and Stubble, Ltd.

Completed: October 2, 1963.

Result: Gas Producer. (Unchanged).

Previously drilled (1952) to depth of 2,314' from Elevation 650' + 2'.

| Formation                     | Top     | Thickness |
|-------------------------------|---------|-----------|
| Salina (1952).....            | 1,320   | 994       |
| DEEPENING                     |         |           |
| Salina (continued, 1963)..... | 2,314+2 | 117       |
| Guelph.....                   | 2,433   | 47        |
| Total Depth:.....             | 2,480'  |           |

Geologist: W. E. Koepke.

## IMPERIAL No. 840

Moore tp., lot 3, con. X.

Co-ordinates: 2,485' S., 630' E.

Elevation: 650' + 2'.

Driller: L. O. Patterson.

Completed: February 15, 1963.

Result: Core Test, suspended.

| Formation          | Top  | Thickness |
|--------------------|------|-----------|
| Drift.....         | 2    | 142       |
| Hamilton.....      | 144  | 237       |
| Dundee.....        | 381  | 115       |
| Detroit River..... | 496  | 3         |
| Total Depth:.....  | 499' |           |

Geologist: J. V. Hill.

## IMPERIAL CORUNNA No. 22 (859)

Moore tp., lot 19, con. X.

Co-ordinates: 150' S., 555' E.

Elevation: 645' + 3'.

Driller: L. O. Patterson.

Completed: December 9, 1963.

Result: Gas and Oil Producer.

Reported Flow: 226 Mcf/d. 15 bbl/d. WHP. 320 psig.

| Formation          | Top   | Thickness |
|--------------------|-------|-----------|
| Drift.....         | 3     | 137       |
| Kettle Point.....  | 140   | 88        |
| Hamilton.....      | 228   | 270       |
| Dundee.....        | 498   | 73        |
| Columbus.....      | 571   | 39        |
| Detroit River..... | 610   | 324       |
| Bois Blanc.....    | 934   | 142       |
| Bass Island.....   | 1,076 | 195       |
| Salina.....        | 1,271 | 1,056     |

Top of A2—2,104.

Top of A1—2,299.

|                      |        |     |
|----------------------|--------|-----|
| Guelph-Lockport..... | 2,327  | 224 |
| Total Depth:.....    | 2,551' |     |

Geologist: W. E. Koepke.

| Water            | Gas                  | Oil        |
|------------------|----------------------|------------|
| Fresh at 137'.   | At 2,274 to 2,279'.  | At 2,401   |
| Sulphur at 638'. | 2,282' to 2,297'     | to 2,520'. |
|                  | and 2,310 to 2,401'. |            |

## RAM-IMPERIAL MOORE 12-7

Moore tp., lot 12, con. VII.

Co-ordinates: 1,650' S., 330' W.

Elevation: 630' + 3'.

Driller: Rawlings Drilling Co., Ltd.

Completed: June 11, 1963.

Result: Abandoned.

| Formation            | Top    | Thickness |
|----------------------|--------|-----------|
| Drift.....           | 3      | 128       |
| Kettle Point.....    | 131    | 81        |
| Hamilton.....        | 212    | 250       |
| Dundee.....          | 462    | 95        |
| Detroit River.....   | 557    | 362       |
| Bois Blanc.....      | 919    | 129       |
| Bass Island.....     | 1,048  | 162       |
| Salina.....          | 1,210  | 1,112     |
| Top of A2—1,920      |        |           |
| Top of A1—2,180      |        |           |
| Guelph-Lockport..... | 2,322  | 106       |
| Rochester.....       | 2,428  | 9         |
| Total Depth:.....    | 2,437' |           |

Geologist: W. E. Koepke.

| Water                   |
|-------------------------|
| Fresh at 118' and 130'. |
| Sulphur at 580'.        |



**UNION MOORE 2-II**  
Moore tp., lot 2, con. II.

Co-ordinates: 1,650' S., 500' E.  
Elevation: 626' + 2'.  
Driller: H. W. Meier.  
Completed: September 20, 1963.  
Result: Abandoned.

| Formation            | Top    | Thickness |
|----------------------|--------|-----------|
| Drift.....           | 2      | 63        |
| Kettle Point.....    | 65     | 58        |
| Hamilton.....        | 123    | 267       |
| Dundee.....          | 390    | 100       |
| Detroit River.....   | 490    | 314       |
| Bois Blanc.....      | 804    | 167       |
| Bass Island.....     | 971    | 127       |
| Salina.....          | 1,098  | 1,005     |
| Top of A2—1,742      |        |           |
| Top of A1—1,960      |        |           |
| Guelph-Lockport..... | 2,103  | 97        |
| Rochester.....       | 2,200  | 20        |
| Total Depth:.....    | 2,220' |           |

Geologist: W. E. Koepke.

**Water**

Sulphur at 542'.

**UNION MOORE 4-II**  
Moore tp., lot 4, con. II.

Co-ordinates: 1,650' S. of Rd., 500' W. of Rd.  
Elevation: 622' + 2'.  
Driller: H. W. Meier.  
Completed: November 6, 1963.  
Result: Abandoned.  
Reported Flow: 57 Mcf/d. WHP, 851 psig.

| Formation            | Top    | Thickness |
|----------------------|--------|-----------|
| Drift.....           | 2      | 66        |
| Kettle Point.....    | 68     | 61        |
| Hamilton.....        | 129    | 267       |
| Dundee.....          | 396    | 110       |
| Detroit River.....   | 506    | 294       |
| Bois Blanc.....      | 800    | 174       |
| Bass Island.....     | 974    | 142       |
| Salina.....          | 1,116  | 984       |
| Top of A2—1,740      |        |           |
| Top of A1—1,965      |        |           |
| Guelph-Lockport..... | 2,100  | 108       |
| Rochester.....       | 2,208  | 14        |
| Total Depth:.....    | 2,222' |           |

Geologist: W. E. Koepke.

**Water**

**Gas**

**Oil**

Sulphur at 457'. At 2,107' to 2,207'. Show at 2,119'.

**CANADIAN DELHI No. 21**  
Plympton tp., lot 1, con. VI.

Co-ordinates: 2,000' S., 410' W.  
Elevation: 616' + 3'.  
Driller: Chevalier & Tremblay Drilling Co., Ltd.  
Completed: February 10, 1963.  
Result: Abandoned.

| Formation            | Top    | Thickness |
|----------------------|--------|-----------|
| Drift.....           | 3      | 104       |
| Kettle Point.....    | 107    | 75        |
| Hamilton.....        | 182    | 310       |
| Dundee.....          | 492    | 106       |
| Detroit River.....   | 598    | 354       |
| Bois Blanc.....      | 952    | 168       |
| Bass Island.....     | 1,120  | 158       |
| Salina.....          | 1,278  | 1,327     |
| Top of A2—2,214      |        |           |
| Top of A1—2,484      |        |           |
| Guelph-Lockport..... | 2,605  | 87        |
| Rochester.....       | 2,692  | 23        |
| Total Depth:.....    | 2,715' |           |

Geologist: W. E. Koepke.

**Water**

Sulphur at 570'.

Salt at 1,323'.

**IMPERIAL No. 843**  
Plympton tp., lot 6, con. IV.

Co-ordinates: 1600' N., 375' W.  
Elevation: 663' + 4'.  
Driller: W. R. Kiser.  
Completed: April 15, 1963.  
Result: Abandoned.

| Formation            | Top    | Thickness |
|----------------------|--------|-----------|
| Drift.....           | 4      | 141       |
| Kettle Point.....    | 145    | 35        |
| Hamilton.....        | 180    | 297       |
| Dundee.....          | 477    | 108       |
| Detroit River.....   | 585    | 342       |
| Bois Blanc.....      | 927    | 173       |
| Bass Island.....     | 1,100  | 172       |
| Salina.....          | 1,272  | 944       |
| Top of A2—2,018      |        |           |
| Top of A1—2,188      |        |           |
| Guelph-Lockport..... | 2,216  | 404       |
| Rochester.....       | 2,620  | 24        |
| Total Depth:.....    | 2,644' |           |

Geologist: W. E. Koepke.

**Water**

Fresh at 140'.

Sulphur at 590'.

**WESTBURNE PLYMPTON 4-II**  
Plympton tp., lot 4, con. II.

Co-ordinates: 1,500' N., 650' E.  
Elevation: 654' + 3'.  
Driller: Demaray and Nichols.  
Completed: November 20, 1963.  
Result: Abandoned.

| Formation            | Top    | Thickness |
|----------------------|--------|-----------|
| Drift.....           | 3      | 151       |
| Hamilton.....        | 154    | 264       |
| Dundee.....          | 418    | 110       |
| Detroit River.....   | 528    | 322       |
| Bois Blanc.....      | 850    | 180       |
| Bass Island.....     | 1,030  | 246       |
| Salina.....          | 1,276  | 1,172     |
| Top of A2—2,065      |        |           |
| Top of A1—2,318      |        |           |
| Guelph-Lockport..... | 2,448  | 85        |
| Rochester.....       | 2,533  | 19        |
| Total Depth:.....    | 2,552' |           |

Geologist: W. E. Koepke.

**Water**

**Gas**

**Oil**

Fresh at 161'.

Show at 545'.

Show at 552' to 587'.

Sulphur at 545'.

**BP—TRIAD—IMPERIAL SARNIA 8-III**  
Sarnia tp., lot 8, con. III.

Co-ordinates: 1,400' S., 600' W.  
Elevation: 622' + 3'.  
Driller: Demaray & Nichols.  
Completed: July 23, 1963.  
Result: Abandoned.

| Formation            | Top    | Thickness |
|----------------------|--------|-----------|
| Drift.....           | 3      | 120       |
| Hamilton.....        | 123    | 277       |
| Dundee.....          | 400    | 102       |
| Detroit River.....   | 502    | 363       |
| Bois Blanc.....      | 865    | 175       |
| Bass Island.....     | 1,040  | 225       |
| Salina.....          | 1,265  | 1,301     |
| Top of A2—2,162      |        |           |
| Top of A1—2,412      |        |           |
| Guelph-Lockport..... | 2,566  | 92        |
| Rochester.....       | 2,658  | 19        |
| Total Depth:.....    | 2,677' |           |

Geologist: W. E. Koepke.

**Water**

Fresh at 118'.

Sulphur at 520'.

## W.P. CARR-SARNIA 3-5-IV

Sarnia tp., lot 5, con. IV.

Co-ordinates: 1,550' S. of Rd., 400' E.

Elevation: 623' + 4'.

Driller: Mandley Drilling Contractors, Ltd.

Completed: November 28, 1963.

Result: Abandoned.

| Formation          | Top   | Thickness |
|--------------------|-------|-----------|
| Drift.....         | 4     | 113       |
| Hamilton.....      | 117   | 297       |
| Dundee.....        | 414   | 58        |
| Columbus.....      | 472   | 48        |
| Detroit River..... | 520   | 307       |
| Bois Blanc.....    | 827   | 211       |
| Bass Island.....   | 1,038 | 222       |
| Salina.....        | 1,260 | 1,274     |

Top of A2—2,142

Top of A1—2,386

Guelph-Lockport..... 2,534 98

Rochester..... 2,632 5

Total Depth:..... 2,637'.

Geologist: W. E. Koepke.

Water Gas  
 Fresh at 45'. Show at 417'.  
 Sulphur at 470'.

## B. A.—IMPERIAL SOMBRA 27-VIII

Sombra tp., lot 27, con. VIII.

Co-ordinates: 1,700' N., 400' E.

Elevation: 612' + 4'.

Driller: R. L. McPherson.

Completed: November 2, 1963.

Result: Abandoned.

| Formation          | Top   | Thickness |
|--------------------|-------|-----------|
| Drift.....         | 4     | 77        |
| Kettle Point.....  | 81    | 264       |
| Hamilton.....      | 345   | 305       |
| Dundee.....        | 650   | 80        |
| Columbus.....      | 730   | 38        |
| Detroit River..... | 768   | 252       |
| Bois Blanc.....    | 1,020 | 148       |
| Bass Island.....   | 1,168 | 104       |
| Salina.....        | 1,272 | 662       |

Top of A2—1,624

Top of A1—1,802

Guelph-Lockport..... 1,934 109

Rochester..... 2,043 4

Total Depth:..... 2,047'.

Geologist: W. E. Koepke.

Water Gas  
 Fresh at 75'. Show at 1,942' to 1,947'.  
 Sulphur at 723'.

## BP—TRIAD—IMPERIAL SOMBRA 15—XV

Sombra tp., lot 15, con. XV.

Co-ordinates: 250' N., 150' E.

Elevation: 615' + 2'.

Driller: H. W. Meier.

Completed: February 19, 1963.

Result: Gas Producer.

Reported Flow: 581 Mcf/d. WHP. 995 psig.

## BLACK CLOUD No. 1

Sombra tp., lot 29, con. X.

Co-ordinates: 1,500' N., 500' W.

Elevation: 622' + 4'.

Driller: Mandley Drilling Ltd.

Completed: November 7, 1963.

Result: Abandoned.

| Formation          | Top   | Thickness |
|--------------------|-------|-----------|
| Drift.....         | 4     | 74        |
| Kettle Point.....  | 78    | 262       |
| Hamilton.....      | 340   | 234       |
| Dundee.....        | 574   | 120       |
| Detroit River..... | 694   | 216       |
| Bois Blanc.....    | 910   | 172       |
| Bass Island.....   | 1,082 | 118       |
| Salina.....        | 1,200 | 752       |

Top of A2—1,622

Top of A1—1,815

Guelph-Lockport..... 1,952 112

Total Depth:..... 2,064'.

Geologist: W. E. Koepke.

Water Oil  
 Fresh at 83'. Show at 1,962' to  
 Black at 666'. 1,966'.  
 Salt at 1,930'.

| Formation          | Top   | Thickness |
|--------------------|-------|-----------|
| Drift.....         | 2     | 144       |
| Kettle Point.....  | 146   | 202       |
| Hamilton.....      | 348   | 230       |
| Dundee.....        | 578   | 81        |
| Detroit River..... | 659   | 315       |
| Bois Blanc.....    | 974   | 127       |
| Bass Island.....   | 1,101 | 125       |
| Salina.....        | 1,226 | 932       |

Top of A2—1,830

Top of A1—2,022

Guelph-Lockport..... 2,158 152

Rochester..... 2,310 29

Total Depth:..... 2,339'.

Discovery Well.

Geologist: W. E. Koepke.

Water Gas  
 Fresh at 140'. At 2,167' to 2,182' and  
 Sulphur at 687'. 2,193' to 2,196'.

ECKFORD AND WHITTY No. 4  
Sombra tp., lot 30, con. X.

Co-ordinates: 1,650' N., 500' W.  
Elevation: 622' + 4'.  
Driller: Rawlings Drilling Co., Ltd.  
Completed: August 24, 1963.  
Result: Oil Producer.  
Reported Flow: 20 bbl/d. WHP. 500 psig.

| Formation            | Top    | Thickness |
|----------------------|--------|-----------|
| Drift.....           | 4      | 63        |
| Kettle Point.....    | 67     | 285       |
| Hamilton.....        | 352    | 258       |
| Dundee.....          | 610    | 72        |
| Detroit River.....   | 682    | 310       |
| Bois Blanc.....      | 992    | 128       |
| Bass Island.....     | 1,120  | 125       |
| Salina.....          | 1,245  | 700       |
| Top of A2—1,622      |        |           |
| Top of A1—1,808      |        |           |
| Guelph-Lockport..... | 1,945  | 21        |
| Total Depth:.....    | 1,966' |           |

Geologist: W. E. Koepke.  
Water Oil  
Fresh at 60'. At 1,959' to 1,966'.  
Sulphur at 730'.  
Salt at 1,821'.

ECKFORD AND WHITTY No. 5  
Sombra tp., lot 30, con. X.

Co-ordinates: 550' N., 500' W.  
Elevation: 621' + 3'.  
Driller: Rawlings Drilling Co., Ltd.  
Completed: October 8, 1963.  
Result: Abandoned.

| Formation            | Top    | Thickness |
|----------------------|--------|-----------|
| Drift.....           | 3      | 57        |
| Kettle Point.....    | 60     | 280       |
| Hamilton.....        | 340    | 233       |
| Dundee.....          | 573    | 103       |
| Detroit River.....   | 676    | 292       |
| Bois Blanc.....      | 968    | 174       |
| Bass Island.....     | 1,142  | 123       |
| Salina.....          | 1,265  | 684       |
| Top of A2—1,630      |        |           |
| Top of A1—1,815      |        |           |
| Guelph-Lockport..... | 1,949  | 39        |
| Total Depth:.....    | 1,988' |           |

Geologist: W. E. Koepke.  
Water Oil  
Fresh at 60' and 170'. Show at 1,953' to 1,959'.  
Sulphur at 710'.

IMPERIAL No. 839  
Sombra tp., lot 8, con. XIV.

Co-ordinates: 1,550' N., 400' W.  
Elevation: 615' + 5'.  
Driller: Chevalier & Tremblay.  
Completed March 5, 1963.  
Result: Abandoned.

| Formation            | Top    | Thickness |
|----------------------|--------|-----------|
| Drift.....           | 5      | 180       |
| Kettle Point.....    | 185    | 207       |
| Hamilton.....        | 392    | 224       |
| Dundee.....          | 616    | 94        |
| Detroit River.....   | 710    | 285       |
| Bois Blanc.....      | 995    | 150       |
| Bass Island.....     | 1,145  | 114       |
| Salina.....          | 1,259  | 994       |
| Top of A2—1,905      |        |           |
| Top of A1—2,116      |        |           |
| Guelph-Lockport..... | 2,253  | 107       |
| Rochester.....       | 2,360  | 26        |
| Total Depth:.....    | 2,386' |           |

Geologist: W. E. Koepke.  
Water Fresh at 179'. Sulphur at 729'. Salt at 2,276'.

IMPERIAL BECHER No. 75 (849)  
Sombra tp., lot 9, con. V.

Co-ordinates: 2,350' N., 500' E.  
Elevation: 581' + 4'.  
Driller: W. R. Kiser.  
Completed: July 4, 1963.  
Result: Oil Producer.  
Reported Flow: 10 bbl/d.

| Formation            | Top    | Thickness |
|----------------------|--------|-----------|
| Drift.....           | 4      | 112       |
| Kettle Point.....    | 116    | 170       |
| Hamilton.....        | 286    | 209       |
| Dundee.....          | 495    | 81        |
| Detroit River.....   | 576    | 286       |
| Bois Blanc.....      | 862    | 124       |
| Bass Island.....     | 986    | 131       |
| Salina.....          | 1,117  | 871       |
| Top of A2—1,672      |        |           |
| Top of A1—1,864      |        |           |
| Guelph-Lockport..... | 1,988  | 27        |
| Total Depth:.....    | 2,015' |           |

Geologist: W. E. Koepke.  
Water Gas  
Fresh at 114'. At 1,864' to 1,865'.  
Sulphur at 588' and 905'. 1,872' to 1,882' and  
Salt at 2,014'. 1,896' to 1,926'.

IMPERIAL BECHER No. 76 (853)  
Sombra tp., lot 9, con. V.

Co-ordinates: 1000' S., 360' W.  
Elevation: 582' + 4'.  
Driller: W. R. Kiser.  
Completed: August 15, 1963.  
Result: Water Injection Well.  
Reported Flow: 75 Mcf/d. 3 bbl/d. WHP. N.R. psig.

| Formation          | Top    | Thickness |
|--------------------|--------|-----------|
| Drift.....         | 4      | 129       |
| Kettle Point.....  | 133    | 147       |
| Hamilton.....      | 280    | 212       |
| Dundee.....        | 492    | 94        |
| Detroit River..... | 586    | 277       |
| Bois Blanc.....    | 863    | 109       |
| Bass Island.....   | 972    | 135       |
| Salina.....        | 1,107  | 828       |
| Top of A2—1,660    |        |           |
| Top of A1—1,858    |        |           |
| Total Depth:.....  | 1,935' |           |

Geologist: W. E. Koepke.  
Water Gas Oil  
Sulphur at 586'. At 1,862' to 1,864'. At 1,871' to 1,877'.

IMPERIAL BECHER 9-V-S.W. No. 1 (854)  
Sombra tp., lot 9, con. V.

Co-ordinates: 989' S., 50' E.  
Elevation: 584' + 1'.  
Driller: Demaray and Nichols.  
Completed: July 30, 1963.  
Result: Source Well.

| Formation          | Top    | Thickness |
|--------------------|--------|-----------|
| Drift.....         | 1      | 131       |
| Kettle Point.....  | 132    | 158       |
| Hamilton.....      | 290    | 204       |
| Dundee.....        | 494    | 96        |
| Detroit River..... | 590    | 270       |
| Bois Blanc.....    | 860    | 110       |
| Bass Island.....   | 970    | 30        |
| Total Depth:.....  | 1,000' |           |

Geologist: W. E. Koepke.  
Water Gas  
Fresh at 132'. Show at 112' and 163'.  
Sulphur at 607'.

## IMPERIAL BECHER No. 77 (858)

Sombra tp., lot 9, con. V.

Co-ordinates: 1,950' N., 360' W.  
 Elevation: 581' + 4'.  
 Driller: W. R. Kiser.  
 Completed: September 24, 1963.  
 Result: Water Injection.

| Formation          | Top   | Thickness |
|--------------------|-------|-----------|
| Drift.....         | 4     | 112       |
| Kettle Point.....  | 116   | 164       |
| Hamilton.....      | 280   | 208       |
| Dundee.....        | 488   | 100       |
| Detroit River..... | 588   | 262       |
| Bois Blanc.....    | 850   | 119       |
| Bass Island.....   | 969   | 134       |
| Salina.....        | 1,103 | 839       |

Top of A2—1,664

Top of A1—1,857

Total Depth: 1,942'

Geologist: W. E. Koepke.

Water

Fresh at 116'.

Sulphur at 600'.

Oil

Show at 1,857' to 1,859'.

1,862' to 1,870' and

1,896' to 1,919'.

## IMPERIAL BECHER 9-V-S.W. No. 2 (862)

Sombra tp., lot 9, con. V.

Co-ordinates: 1,489' S., 83' E.  
 Elevation: 581' + 4'.  
 Driller: W. R. Kiser.  
 Completed: November 9, 1963.  
 Result: Water Source Well.

| Formation          | Top | Thickness |
|--------------------|-----|-----------|
| Drift.....         | 4   | 128       |
| Kettle Point.....  | 132 | 164       |
| Hamilton.....      | 296 | 206       |
| Dundee.....        | 502 | 86        |
| Detroit River..... | 588 | 268       |
| Bois Blanc.....    | 856 | 128       |
| Bass Island.....   | 984 | 16        |

Total Depth: 1,000'.

Geologist:

Water

Salt and sulphur at 620'.

## I.O.E.-B.P.-SOMBRA 6-15-XV (865)

Sombra tp., lot 15, con. XV.

Co-ordinates: 1,620' N., 495' E.  
 Elevation: 614' + 5'.  
 Driller: Stubble and Stubble Ltd.  
 Completed: December 11, 1963.  
 Result: Abandoned.

| Formation          | Top   | Thickness |
|--------------------|-------|-----------|
| Drift.....         | 5     | 145       |
| Kettle Point.....  | 150   | 224       |
| Hamilton.....      | 374   | 218       |
| Dundee.....        | 592   | 84        |
| Columbus.....      | 676   | 16        |
| Detroit River..... | 692   | 268       |
| Bois Blanc.....    | 960   | 157       |
| Bass Island.....   | 1,117 | 110       |
| Salina.....        | 1,227 | 981       |

Top of A2—1,850

Top of A1—2,073

Guelph-Lockport..... 2,208 118

Rochester..... 2,326 16

Total Depth: 2,342'.

Geologist: W. E. Koepke.

Water

Fresh at 139'.

Sulphur at 707'.

## HOME—C.D.R. WALPOLE ISLAND No. 1

Walpole Island, lot 317, I.R. No. 46.

Co-ordinates: 250' N., 250' W.  
 Elevation: 577' + 4'.  
 Driller: Emery English Drilling Co.  
 Completed: November 7, 1963.  
 Result: Abandoned.

| Formation          | Top   | Thickness |
|--------------------|-------|-----------|
| Drift.....         | 4     | 81        |
| Kettle Point.....  | 85    | 5         |
| Hamilton.....      | 90    | 235       |
| Dundee.....        | 325   | 102       |
| Columbus.....      | 427   | 25        |
| Detroit River..... | 452   | 340       |
| Bois Blanc.....    | 792   | 188       |
| Bass Island.....   | 980   | 312       |
| Salina.....        | 1,292 | 578       |

Top of A2—1,631

Top of A1—1,756

|                                   |       |     |
|-----------------------------------|-------|-----|
| Guelph-Lockport.....              | 1,870 | 122 |
| Rochester.....                    | 1,992 | 26  |
| Dyer Bay.....                     | 2,018 | 6   |
| Cabot Head.....                   | 2,024 | 101 |
| Manitoulin.....                   | 2,125 | 57  |
| Queenston.....                    | 2,182 | 318 |
| Meaford-Dundas and Collingwood... | 2,500 | 340 |
| Cobourg.....                      | 2,840 | 117 |
| Sherman Fall.....                 | 2,957 | 93  |
| Kirkfield.....                    | 3,050 | 236 |
| Coboconk.....                     | 3,286 | 96  |
| Gull River.....                   | 3,382 | 397 |
| Shadow Lake.....                  | 3,379 | 4   |
| Precambrian.....                  | 3,783 | 5   |

Total Depth: 3,788'.

Geologist: W. E. Koepke.

Water

Sulphur at 367'.

## BENGAL DEVELOPMENT No. 1

Warwick tp., lot 2, con. VI S.E.R.

Co-ordinates: 517' N., 500' W.  
 Elevation: 694' + 3'.  
 Driller: R. L. McPherson Drilling, Ltd.  
 Completed: June 20, 1963.  
 Result: Abandoned.

| Formation          | Top   | Thickness |
|--------------------|-------|-----------|
| Drift.....         | 3     | 52        |
| Kettle Point.....  | 55    | 87        |
| Hamilton.....      | 142   | 268       |
| Dundee.....        | 410   | 95        |
| Detroit River..... | 505   | 295       |
| Bois Blanc.....    | 800   | 195       |
| Bass Island.....   | 995   | 195       |
| Salina.....        | 1,140 | 1,024     |

Top of A2—1,792

Top of A1—2,012

Guelph-Lockport..... 2,164 87

Rochester..... 2,251 5

Total Depth: 2,256'.

Geologist: W. E. Koepke.

Water

Fresh at 55'.

Sulphur at 505'.

Salt at 2,178'.

BENGAL DEVELOPMENT No. 2  
Warwick tp., lot 2, con. VI S.E.R.

Co-ordinates: 955' N., 110' W.  
Elevation: 692' + 4'.  
Driller: R. L. McPherson Drilling, Ltd.  
Completed: August 8, 1963.  
Result: Abandoned.

| Formation          | Top   | Thickness |
|--------------------|-------|-----------|
| Drift.....         | 4     | 46        |
| Kettle Point.....  | 50    | 90        |
| Hamilton.....      | 140   | 269       |
| Dundee.....        | 409   | 103       |
| Detroit River..... | 512   | 278       |
| Bois Blanc.....    | 790   | 195       |
| Bass Island.....   | 985   | 149       |
| Salina.....        | 1,134 | 1,029     |

Top of A2—1,796  
Top of A1—2,010  
Guelph-Lockport..... 2,163 82  
Rochester..... 2,245 4  
Total Depth:..... 2,249'  
Geologist: W. E. Koepke.  
Water  
Sulphur at 510'.  
Salt at 2,185'.

B.A.-WARWICK 22-6 N.E.R. (23)  
Warwick tp., lot 22, con. VI N.E.R.

Co-ordinates: 1,500' S. along E.L.L., 400' W.  
Elevation: 780' + 4'.  
Driller: H. W. Meier.  
Completed: February 18, 1963.  
Result: Abandoned.

| Formation          | Top   | Thickness |
|--------------------|-------|-----------|
| Drift.....         | 4     | 71        |
| Kettle Point.....  | 75    | 36        |
| Hamilton.....      | 111   | 275       |
| Dundee.....        | 386   | 106       |
| Detroit River..... | 492   | 328       |
| Bois Blanc.....    | 820   | 178       |
| Bass Island.....   | 998   | 139       |
| Salina.....        | 1,137 | 1,008     |

Top of A2—1,806  
Top of A1—2,007  
Guelph-Lockport..... 2,145 98  
Rochester..... 2,243 12  
Total Depth:..... 2,255'  
Geologist: B. V. Sanford.  
Water Oil  
Fresh at 61'. Show at 480'.  
Sulphur at 480'.  
Salt at 2,187'.

S. EARL No. 6  
Warwick tp., lot 24, con. I N.E.R.

Co-ordinates: 750' S., 250' W.  
Elevation:  
Driller: S. Earl.  
Completed: July 2, 1963.  
Result: Abandoned.

| Formation         | Top | Thickness |
|-------------------|-----|-----------|
| Drift.....        | 0   | 105       |
| Kettle Point..... | 105 | 30        |
| Hamilton.....     | 135 | 259       |
| Total Depth:..... |     | 394'      |

Geologist: W. E. Koepke.  
Water  
Fresh at 105'.

B. A. WARWICK 10-VI S.E.R. (27)  
Warwick tp., lot 10, con. VI S.E.R.

Co-ordinates: 1,650' N., 500' W.  
Elevation: 713' + 4'.  
Driller: H. W. Meier.  
Completed: October 4, 1963.  
Result: Abandoned.

| Formation          | Top   | Thickness |
|--------------------|-------|-----------|
| Drift.....         | 4     | 36        |
| Kettle Point.....  | 40    | 83        |
| Hamilton.....      | 123   | 265       |
| Dundee.....        | 388   | 90        |
| Detroit River..... | 478   | 296       |
| Bois Blanc.....    | 774   | 191       |
| Bass Island.....   | 965   | 147       |
| Salina.....        | 1,112 | 986       |

Top of A2—1,750  
Top of A1—1,963  
Guelph-Lockport..... 2,098 50  
Total Depth:..... 2,148'.  
Geologist: W. E. Koepke.  
Water  
Fresh at 40'.  
Sulphur at 501'.  
Salt at 2,113' and 2,148'.

ECKFORD AND WESTWOOD No. 1  
Warwick tp., lot 17, con. V S.E.R.

Co-ordinates: 550' S., 470' E.  
Elevation: 755' + 2'.  
Driller: Demaray & Nichols.  
Completed: January 16, 1963.  
Result: Abandoned.

| Formation          | Top   | Thickness |
|--------------------|-------|-----------|
| Drift.....         | 2     | 78        |
| Kettle Point.....  | 80    | 40        |
| Hamilton.....      | 120   | 256       |
| Dundee.....        | 376   | 93        |
| Detroit River..... | 469   | 359       |
| Bois Blanc.....    | 828   | 148       |
| Bass Island.....   | 976   | 155       |
| Salina.....        | 1,131 | 948       |

Top of A2—1,724  
Top of A1—1,927  
Guelph-Lockport..... 2,079 30  
Total Depth:..... 2,109'.  
Geologist: B. V. Sanford.  
Water Gas  
Fresh at 80'. Show at 1,925' to 1,926'.  
Sulphur at 560'.  
Salt at 2,095'.

WALLIS-AULD No. 1  
Warwick tp., lot 12, con. II S.E.R.

Co-ordinates: 787' N., 141' W.  
Elevation:  
Driller: S. Earl.  
Completed: July 10, 1963.  
Result: Abandoned.

| Formation          | Top   | Thickness |
|--------------------|-------|-----------|
| Drift.....         | 0     | 45        |
| Kettle Point.....  | 45    | 45        |
| Hamilton.....      | 90    | 275       |
| Dundee.....        | 365   | 110       |
| Detroit River..... | 475   | 291       |
| Bois Blanc.....    | 766   | 192       |
| Bass Island.....   | 958   | 142       |
| Salina.....        | 1,100 | 1,009     |

Top of A2—1,750  
Top of A1—1,962  
Guelph-Lockport..... 2,109 13  
Total Depth:..... 2,122'.  
Geologist: W. E. Koepke.  
Water  
Fresh at 28'.  
Sulphur at 488'.  
Salt at 2,122'.

## CANADIAN DELHI-EKFRID 5-III S.L.R.

Ekfrid tp., lot 5, range III S.L.R.

Co-ordinates: 1,760' S., 4,440' W.  
 Elevation: 704' + 3'.  
 Driller: Chevalier & Tremblay.  
 Completed: October 30, 1963.  
 Result: Abandoned.

| Formation                           | Top    | Thickness |
|-------------------------------------|--------|-----------|
| Drift.....                          | 3      | 159       |
| Hamilton.....                       | 162    | 96        |
| Dundee.....                         | 258    | 76        |
| Columbus.....                       | 334    | 76        |
| Detroit River.....                  | 410    | 135       |
| Bois Blanc.....                     | 545    | 230       |
| Bass Island.....                    | 775    | 95        |
| Salina.....                         | 870    | 506       |
| Top of A2—1,205                     |        |           |
| Top of A1—1,300                     |        |           |
| Guelph-Lockport.....                | 1,376  | 204       |
| Rochester.....                      | 1,580  | 38        |
| Reynales.....                       | 1,618  | 22        |
| Cabot Head.....                     | 1,640  | 50        |
| Manitoulin.....                     | 1,690  | 65        |
| Queenston.....                      | 1,755  | 445       |
| Meaford-Dundas and Collingwood..... | 2,200  | 530       |
| Cobourg.....                        | 2,730  | 170       |
| Sherman Fall.....                   | 2,900  | 114       |
| Kirkfield.....                      | 3,014  | 206       |
| Coboconk.....                       | 3,220  | 70        |
| Gull River.....                     | 3,290  | 288       |
| Shadow Lake.....                    | 3,578  | 3         |
| Trempealeau.....                    | 3,581  | 9         |
| Arkose.....                         | 3,590  | 9         |
| Precambrian.....                    | 3,599  | 13        |
| Total Depth.....                    | 3,612' |           |

Geologist: W. E. Koepke.

Water Gas  
 Sulphur at 715'. Show at 1,212'.  
 Salt at 1,401'.

## IMPERIAL EKFRID 21-IV

Ekfrid tp., lot 21, con. IV.

Co-ordinates: 1,425' N., 695' E.  
 Elevation: 737' + 2'.  
 Driller: Demaray & Nichols.  
 Completed: August 9, 1963.  
 Result: Abandoned.

| Formation          | Top  | Thickness |
|--------------------|------|-----------|
| Drift.....         | 2    | 103       |
| Kettle Point.....  | 105  | 17        |
| Hamilton.....      | 122  | 273       |
| Dundee.....        | 395  | 73        |
| Columbus.....      | 486  | 57        |
| Detroit River..... | 525  | 77        |
| Total Depth.....   | 602' |           |

Geologist: W. E. Koepke.

Water  
 Fresh at 90'.  
 Sulphur at 480'.

## UNIVERSITY OF WESTERN ONTARIO No. 4

London tp., City of London.

Co-ordinates: 43° 00' 36" N., 81° 16' 18" W.  
 Elevation: 813' + 2'.  
 Driller: Canadian Longyear Co.  
 Completed: October 23, 1963.  
 Result: Observation Well.

| Formation            | Top    | Thickness |
|----------------------|--------|-----------|
| Drift.....           | 2      | 104       |
| Dundee.....          | 106    | 39        |
| Columbus.....        | 145    | 8         |
| Detroit River.....   | 153    | 267       |
| Bois Blanc.....      | 420    | 171       |
| Bass Island.....     | 591    | 112       |
| Salina.....          | 703    | 460       |
| Top of A2—1,016      |        |           |
| Top of A1—1,101      |        |           |
| Guelph-Lockport..... | 1,163  | 219       |
| Rochester.....       | 1,382  | 50        |
| Reynales.....        | 1,432  | 11        |
| Cabot Head.....      | 1,443  | 72        |
| Manitoulin.....      | 1,515  | 27        |
| Queenston.....       | 1,542  | 393       |
| Meaford-Dundas.....  | 1,935  | 13        |
| Total Depth.....     | 1,938' |           |

Geologist: W. E. Koepke.

Water  
 Porous Zones at 170' and 380'.

## WHITE AND McCLEAR No. 1

McGillivray tp., lot 13, con. VIII W.

Co-ordinates: 1,800' S., 150' W. of c/l.  
 Elevation: 637' + 4'.  
 Driller: Mandley Drilling Contractors, Ltd.  
 Completed: April 23, 1963.  
 Result: Abandoned.

| Formation            | Top    | Thickness |
|----------------------|--------|-----------|
| Drift.....           | 4      | 142       |
| Dundee.....          | 146    | 69        |
| Detroit River.....   | 215    | 352       |
| Bois Blanc.....      | 567    | 177       |
| Bass Island.....     | 744    | 144       |
| Salina.....          | 888    | 954       |
| Top of A2—1,517      |        |           |
| Top of A1—1,710      |        |           |
| Guelph-Lockport..... | 1,842  | 86        |
| Rochester.....       | 1,928  | 18        |
| Total Depth.....     | 1,946' |           |

Geologist: W. E. Koepke.

Water  
 Fresh at 150'.  
 Sulphur at 365'.

ANCHOR-WARDSVILLE No. 25

Mosa tp., lot 13, con. I.

Co-ordinates: 1,900' N., 1,150' W.  
Elevation: 708' + 1'.  
Driller: Anchor Petroleum, Ltd.  
Completed: August 14, 1963.  
Result: Gas Producer.  
Reported Flow: 150 Mcf/d. WHP. 405 psig.

| Formation          | Top | Thickness |
|--------------------|-----|-----------|
| Drift.....         | 1   | 201       |
| Hamilton.....      | 202 | 80        |
| Dundee.....        | 282 | 116       |
| Columbus.....      | 398 | 37        |
| Detroit River..... | 435 | 145       |
| Bois Blanc.....    | 580 | 190       |
| Bass Island.....   | 770 | 100       |
| Salina.....        | 870 | 688       |

Top of A2—1,374

Top of A1—1,487

Guelph-Lockport..... 1,558 44

Total Depth..... 1,602'.

Geologist: W. E. Koepke.

|                                 |                      |
|---------------------------------|----------------------|
| Water                           | Gas                  |
| Fresh at 97' and 202'.          | At 1,488' to 1,582'. |
| Sulphur at 315', 430' and 503'. |                      |
| Salt at 1,602'.                 |                      |

ANCHOR-WARDSVILLE No. 26

Mosa tp., lot 13, con. I.

Co-ordinates: 800' N., 500' E.  
Elevation: 704' + 1'.  
Driller: Anchor Petroleum, Ltd.  
Completed: October 3, 1963.  
Result: Gas Producer.  
Reported Flow: 346 Mcf/d. WHP. 420 psig.

| Formation          | Top | Thickness |
|--------------------|-----|-----------|
| Drift.....         | 1   | 205       |
| Hamilton.....      | 206 | 78        |
| Dundee.....        | 284 | 114       |
| Columbus.....      | 398 | 38        |
| Detroit River..... | 436 | 146       |
| Bois Blanc.....    | 582 | 190       |
| Bass Island.....   | 772 | 102       |
| Salina.....        | 874 | 668       |

Top of A2—1,378

Top of A1—1,486

Total Depth..... 1,542'.

Geologist: W. E. Koepke.

|                        |                                    |     |
|------------------------|------------------------------------|-----|
| Water                  | Gas                                | Oil |
| Fresh at 85' and 346'. | At 1,487' to 1,542'. Show at 380'. |     |

Norfolk County

ROBERTS-SAGADAHOC No. 8

Charlotteville tp., lot 12, con. V.

Co-ordinates: 500' S., 200' E.  
Elevation: 733' + 2'.  
Driller: D. Irving.  
Completed: September 28, 1963.  
Result: Gas Producer.  
Reported Flow: 100 Mcf/d. WHP. 600 psig.

| Formation        | Top | Thickness |
|------------------|-----|-----------|
| Drift.....       | 2   | 203       |
| Dundee.....      | 205 | 41        |
| Bois Blanc.....  | 246 | 186       |
| Bass Island..... | 432 | 83        |
| Salina.....      | 515 | 373       |

Top of A2—832

Guelph-Lockport..... 888 215  
Rochester..... 1,103 71  
Irondequoit..... 1,174 6  
Reynales..... 1,180 4  
Thorold..... 1,184 31  
Grimsby..... 1,215 20  
Total Depth..... 1,235'.

Geologist: W. E. Koepke.

|                           |                                    |               |
|---------------------------|------------------------------------|---------------|
| Water                     | Gas                                | Oil           |
| Sulphur at 216' and 480'. | Show at 216'. At 1,184' to 1,214'. | Show at 216'. |
| Salt at 902'.             |                                    |               |

ROBERTS-SAGADAHOC No. 9

Charlotteville tp., lot 11, con. V.

Co-ordinates: 500' N. of c/l., 1,600' E.  
Elevation: 740' + 2'.  
Driller: D. Irving.  
Completed: November 7, 1963.  
Result: Gas Producer.  
Reported Flow: 200 Mcf/d. WHP. 620 psig.

| Formation        | Top | Thickness |
|------------------|-----|-----------|
| Drift.....       | 2   | 190       |
| Dundee.....      | 192 | 73        |
| Bois Blanc.....  | 265 | 193       |
| Bass Island..... | 458 | 77        |
| Salina.....      | 535 | 349       |

Top of A2—824

Guelph-Lockport..... 884 213  
Rochester..... 1,097 65  
Irondequoit..... 1,162 12  
Reynales..... 1,174 2  
Thorold..... 1,176 8  
Cabot Head..... 1,184 89  
Manitoulin..... 1,273 14  
Whirlpool..... 1,287 4  
Queenston..... 1,291 6  
Total Depth..... 1,297'.

Geologist: W. E. Koepke.

|                                 |  |
|---------------------------------|--|
| Water                           | Gas  |
| Fresh at 198'. Sulphur at 250'. | Show at 1,182' to 1,184'. At 1,200' to 1,204'. |

## STARLITE GAS No. 4

Charlotteville tp., lot 1, con. VI.

Co-ordinates: 850' S., 350' E.  
 Elevation: 737' + 2'.  
 Driller: Emerson & Rose.  
 Completed: January 22, 1963.  
 Result: Gas Producer.  
 Reported Flow: 468 Mcf/d. WHP. 845 psig.

| Formation        | Top | Thickness |
|------------------|-----|-----------|
| Drift.....       | 2   | 212       |
| Delaware.....    | 214 | 128       |
| Columbus.....    | 342 | 10        |
| Bois Blanc.....  | 352 | 178       |
| Bass Island..... | 530 | 64        |
| Salina.....      | 594 | 364       |

Top of A2—890

Top of A1—944

|                      |       |     |
|----------------------|-------|-----|
| Guelph-Lockport..... | 958   | 214 |
| Rochester.....       | 1,172 | 59  |
| Irondequoit.....     | 1,231 | 8   |
| Thorold.....         | 1,239 | 16  |
| Grimsby.....         | 1,255 | 27  |
| Cabot Head.....      | 1,282 | 56  |
| Manitoulin.....      | 1,338 | 16  |
| Whirlpool.....       | 1,354 | 4   |
| Queenston.....       | 1,358 | 6   |

Total Depth: 1,364'.

Geologist: W. E. Koepke.

## Water

Fresh at 227'.  
 Sulphur at 385' and 960'.

## Gas

At 1,247' to 1,262' and  
 1,354' to 1,360'.

## STARLITE GAS No. 5

Charlotteville tp., lot 1, con. VI.

Co-ordinates: 570' S., 1,305' E.  
 Elevation: 739' + 1'.  
 Driller: W. Rose and Sons.  
 Completed: October 16, 1963.  
 Result: Gas Producer.  
 Reported Flow: 97 Mcf/d. WHP. 660 psig.

| Formation        | Top | Thickness |
|------------------|-----|-----------|
| Drift.....       | 1   | 215       |
| Delaware.....    | 216 | 119       |
| Columbus.....    | 335 | 11        |
| Bois Blanc.....  | 346 | 182       |
| Bass Island..... | 528 | 63        |
| Salina.....      | 591 | 363       |

Top of A2—884

Top of A1—932

|                      |       |     |
|----------------------|-------|-----|
| Guelph-Lockport..... | 954   | 222 |
| Rochester.....       | 1,176 | 56  |
| Irondequoit.....     | 1,232 | 3   |
| Reynales.....        | 1,235 | 11  |
| Thorold.....         | 1,246 | 4   |
| Grimsby.....         | 1,250 | 16  |
| Cabot Head.....      | 1,266 | 74  |
| Manitoulin.....      | 1,340 | 12  |
| Whirlpool.....       | 1,352 | 4   |
| Queenston.....       | 1,356 | 46  |

Total Depth: 1,402'.

Geologist: W. E. Koepke.

## Water

Fresh at 219'.  
 Sulphur at 530'.

## Gas

At 1,246' to 1,250' and  
 1,352' to 1,356'.

## MITCHELL &amp; MITCHELL-L.E. No. 393-6

Lake Erie.

Co-ordinates: 42° 29' 59.5" N., 80° 39' 31.8" W.  
 Elevation: 572' + 28' K.B.  
 Driller: Northern Offshore Drilling Co., Ltd.  
 Completed: July 2, 1963.  
 Result: Gas Producer.  
 Reported Flow: 137 Mcf/d. WHP. 636 psig.

| Formation        | Top | Thickness |
|------------------|-----|-----------|
| Lake.....        | 28  | 59        |
| Drift.....       | 87  | 381       |
| Dundee.....      | 468 | 135       |
| Bois Blanc.....  | 603 | 155       |
| Bass Island..... | 758 | 117       |
| Salina.....      | 875 | 373       |

Top of A2—1,170

|                      |       |     |
|----------------------|-------|-----|
| Guelph-Lockport..... | 1,248 | 252 |
| Rochester.....       | 1,500 | 39  |
| Irondequoit.....     | 1,539 | 10  |
| Reynales.....        | 1,549 | 7   |
| Grimsby.....         | 1,556 | 39  |
| Cabot Head.....      | 1,595 | 35  |

Total Depth: 1,630'.

Geologist: W. E. Koepke.

## Water

Not recorded.

## Gas

At 1,550' to 1,554', 1,556'  
 to 1,558', 1,561' to 1,580'  
 and 1,588' to 1,593'.

## MITCHELL &amp; MITCHELL-L.E. No. 380-7

Lake Erie.

Co-ordinates: 42° 28' 41" N., 80° 20' 25" W.  
 Elevation: 572' + 28' K.B.  
 Driller: Northern Offshore Drilling Co., Ltd.  
 Completed: June 23, 1963.  
 Result: Gas Producer.  
 Reported Flow: 756 Mcf/d. WHP. 568 psig.

| Formation        | Top | Thickness |
|------------------|-----|-----------|
| Lake.....        | 28  | 61        |
| Drift.....       | 89  | 411       |
| Dundee.....      | 500 | 70        |
| Bois Blanc.....  | 570 | 150       |
| Bass Island..... | 720 | 100       |
| Salina.....      | 820 | 356       |

Top of A2—1,116

|                      |       |     |
|----------------------|-------|-----|
| Guelph-Lockport..... | 1,176 | 298 |
| Rochester.....       | 1,474 | 42  |
| Irondequoit.....     | 1,516 | 12  |
| Neahga.....          | 1,528 | 8   |
| Grimsby.....         | 1,536 | 52  |
| Cabot Head.....      | 1,588 | 29  |

Total Depth: 1,617'.

Geologist: W. E. Koepke.

## Water

Not recorded.

## Gas

At 1,531' to 1,580'.



MITCHELL & MITCHELL-L.E. No. 343-8

Lake Erie.

Co-ordinates: 42° 31' 14.5" N., 80° 11' 08.0" W.  
Elevation: 572' + 28' K.B.  
Driller: Northern Offshore Drilling Co., Ltd.  
Completed: June 16, 1963.  
Result: Gas Producer.  
Reported Flow: 1,282 Mcf/d. WHP. 647 psig.

| Formation            | Top    | Thickness |
|----------------------|--------|-----------|
| Lake.....            | 28     | 50        |
| Drift.....           | 78     | 307       |
| Dundee.....          | 385    | 55        |
| Bois Blanc.....      | 440    | 156       |
| Bass Island.....     | 596    | 104       |
| Salina.....          | 700    | 380       |
| Top of A2—1,020      |        |           |
| Guelph-Lockport..... | 1,080  | 295       |
| Rochester.....       | 1,375  | 40        |
| Irondequoit.....     | 1,415  | 12        |
| Thorold.....         | 1,427  | 10        |
| Grimsby.....         | 1,437  | 53        |
| Cabot Head.....      | 1,490  | 45        |
| Total Depth:.....    | 1,535' |           |

Geologist: W. E. Koepke.

| Water         | Gas   |
|---------------|---|
| Not recorded. | At 1,430' to 1,438', 1,440' to 1,448', 1,450' to 1,464' and 1,472' to 1,480'. |

MITCHELL & MITCHELL-L.E. No. 341-10

Lake Erie.

Co-ordinates: 42° 26' 48.8" N., 80° 09' 59.0" W.  
Elevation: 572' + 28' K.B.  
Driller: Northern Offshore Drilling Co., Ltd.  
Completed: July 12, 1963.  
Result: Abandoned.

| Formation        | Top | Thickness |
|------------------|-----|-----------|
| Lake.....        | 28  | 150       |
| Drift.....       | 178 | 236       |
| Hamilton.....    | 414 | 36        |
| Dundee.....      | 450 | 224       |
| Bois Blanc.....  | 674 | 148       |
| Bass Island..... | 822 | 83        |
| Salina.....      | 905 | 377       |

Top of A2—1,209

|                      |        |     |
|----------------------|--------|-----|
| Guelph-Lockport..... | 1,282  | 248 |
| Rochester.....       | 1,530  | 45  |
| Irondequoit.....     | 1,575  | 7   |
| Reynales.....        | 1,582  | 8   |
| Thorold.....         | 1,590  | 10  |
| Grimsby.....         | 1,600  | 57  |
| Cabot Head.....      | 1,657  | 78  |
| Whirlpool.....       | 1,735  | 9   |
| Queenston.....       | 1,744  | 30  |
| Total Depth:.....    | 1,774' |     |

Geologist: W. E. Koepke.

| Water         | Gas   |
|---------------|---|
| Not recorded. | Shows at 1,592', 1,598', 1,602', 1,613', 1,620', 1,632' and 1,641'. |

MITCHELL & MITCHELL-L.E. No. 332-9

Lake Erie.

Co-ordinates: 42° 31' 36.3" N., 80° 04' 48.0" W.  
Elevation: 572' + 28' K.B.  
Driller: Northern Offshore Drilling Co., Ltd.  
Completed: June 8, 1963.  
Result: Gas Producer.  
Reported Flow: 184 Mcf/d. WHP. 482 psig.

| Formation            | Top    | Thickness |
|----------------------|--------|-----------|
| Lake.....            | 28     | 70        |
| Drift.....           | 98     | 317       |
| Bois Blanc.....      | 415    | 185       |
| Oriskany.....        | 600    | 20        |
| Bass Island.....     | 620    | 130       |
| Salina.....          | 750    | 340       |
| Top of A2—1,034      |        |           |
| Guelph-Lockport..... | 1,090  | 284       |
| Rochester.....       | 1,374  | 36        |
| Irondequoit.....     | 1,410  | 15        |
| Grimsby.....         | 1,425  | 60        |
| Cabot Head.....      | 1,485  | 35        |
| Total Depth:.....    | 1,520' |           |

Geologist: W. E. Koepke.

| Water                     | Gas                                       |
|---------------------------|---|
| Sulphur at 415' and 720'. | At 1,444' to 1,447' and 1,452' to 1,459'. |

MITCHELL & MITCHELL-L.E. No. 202-11

Lake Erie.

Co-ordinates: 42° 41' 00.8" N., 80° 04' 21.0" W.  
Elevation: 572' + 28' K.B.  
Driller: Northern Offshore Drilling Co., Ltd.  
Completed: August 9, 1963.  
Result: Gas Producer.  
Reported Flow: 524 Mcf/d. WHP. 585 psig.

| Formation          | Top | Thickness |
|--------------------|-----|-----------|
| Lake.....          | 28  | 66        |
| Drift.....         | 94  | 66        |
| Detroit River..... | 160 | 27        |
| Bois Blanc.....    | 187 | 128       |
| Oriskany.....      | 315 | 14        |
| Bass Island.....   | 329 | 66        |
| Salina.....        | 395 | 328       |

Top of A2—662

|                      |        |     |
|----------------------|--------|-----|
| Guelph-Lockport..... | 723    | 262 |
| Rochester.....       | 985    | 48  |
| Irondequoit.....     | 1,033  | 5   |
| Reynales.....        | 1,038  | 8   |
| Thorold.....         | 1,046  | 9   |
| Grimsby.....         | 1,055  | 40  |
| Cabot Head.....      | 1,095  | 47  |
| Total Depth:.....    | 1,142' |     |

Geologist: W. E. Koepke.

| Water         | Gas                  |
|---------------|----------------------|
| Not recorded. | At 1,051' to 1,118'. |

## MITCHELL &amp; MITCHELL-L.E. No. 481-14

Lake Erie.

Co-ordinates: 42° 24' 13.2" N., 80° 43' 22.3" W.  
 Elevation: 572' + 28' K.B.  
 Driller: Northern Offshore Drilling Co., Ltd.  
 Completed: July 27, 1963.  
 Result: Gas Producer.  
 Reported Flow: 16 Mcf/d. WHP. 679 psig.

| Formation        | Top | Thickness |
|------------------|-----|-----------|
| Lake.....        | 28  | 66        |
| Drift.....       | 94  | 290       |
| Hamilton.....    | 384 | 200       |
| Dundee.....      | 584 | 121       |
| Bois Blanc.....  | 705 | 123       |
| Oriskany.....    | 828 | 52        |
| Bass Island..... | 880 | 116       |
| Salina.....      | 996 | 374       |

Top of A2—1,273

Top of A1—1,350

|                      |        |     |
|----------------------|--------|-----|
| Guelph-Lockport..... | 1,370  | 270 |
| Rochester.....       | 1,640  | 40  |
| Irondequoit.....     | 1,680  | 12  |
| Neahga.....          | 1,692  | 6   |
| Thorold.....         | 1,698  | 4   |
| Grimsby.....         | 1,702  | 38  |
| Cabot Head.....      | 1,740  | 38  |
| Total Depth.....     | 1,778' |     |

Geologist: W. E. Koepke.

Water

Gas

Not recorded.

At 1,700' to 1,703', 1,707'  
 to 1,719', 1,729' to 1,734',  
 1,738' to 1,741' and 1,744'  
 to 1,748'.

## MITCHELL &amp; MITCHELL-L.E. No. 386-15

Lake Erie.

Co-ordinates: 42° 30' 55.1" N., 80° 28' 35.3" W.  
 Elevation: 572' + 28' K.B.  
 Driller: Northern Offshore Drilling Co., Ltd.  
 Completed: July 20, 1963.  
 Result: Abandoned.

| Formation        | Top | Thickness |
|------------------|-----|-----------|
| Lake.....        | 28  | 66        |
| Drift.....       | 94  | 344       |
| Dundee.....      | 438 | 112       |
| Bois Blanc.....  | 550 | 130       |
| Oriskany.....    | 680 | 27        |
| Bass Island..... | 707 | 89        |
| Salina.....      | 796 | 367       |

Top of A2—1,093

|                      |        |     |
|----------------------|--------|-----|
| Guelph-Lockport..... | 1,163  | 253 |
| Rochester.....       | 1,416  | 40  |
| Thorold.....         | 1,456  | 24  |
| Grimsby.....         | 1,480  | 44  |
| Cabot Head.....      | 1,524  | 86  |
| Whirlpool.....       | 1,610  | 5   |
| Queenston.....       | 1,615  | 35  |
| Total Depth.....     | 1,650' |     |

Geologist: W. E. Koepke.

Water

Gas

Not recorded.

Shows at 1,490', 1,496',  
 1,500', 1,518' and 1,534'.

## OKO-LAKE ERIE No. 52-6

Lake Erie.

Co-ordinates: 42° 34' 23" N., 80° 11' 29" W.  
 Elevation: 572' + 5' D.F.  
 Driller: Culver Drilling Co.  
 Completed: June 15, 1963.  
 Result: Gas Producer.  
 Reported Flow: 1,566 Mcf/d. WHP. 520 psig.

| Formation        | Top | Thickness |
|------------------|-----|-----------|
| Lake.....        | 5   | 4         |
| Drift.....       | 9   | 307       |
| Dundee.....      | 316 | 32        |
| Bois Blanc.....  | 348 | 150       |
| Bass Island..... | 498 | 82        |
| Salina.....      | 580 | 364       |

Top of A2—892

|                      |        |     |
|----------------------|--------|-----|
| Guelph-Lockport..... | 944    | 322 |
| Rochester.....       | 1,266  | 34  |
| Irondequoit.....     | 1,300  | 7   |
| Reynales.....        | 1,307  | 2   |
| Thorold.....         | 1,309  | 6   |
| Grimsby.....         | 1,315  | 10  |
| Total Depth.....     | 1,325' |     |

Geologist: W. E. Koepke.

Water

Gas

Fresh at 340'.

At 1,332' and 1,335'.

## OKO-LAKE ERIE No. 52-7

Lake Erie.

Co-ordinates: 42° 34' 23" N., 80° 11' 46" W.  
 Elevation: 572' + 6' D.F.  
 Driller: Culver Drilling Co.  
 Completed: June 11, 1963.  
 Result: Abandoned.  
 Reported Flow: 40 Mcf/d. WHP. N.R. psig.

| Formation        | Top | Thickness |
|------------------|-----|-----------|
| Lake.....        | 6   | 5         |
| Drift.....       | 11  | 286       |
| Bois Blanc.....  | 297 | 197       |
| Bass Island..... | 494 | 81        |
| Salina.....      | 575 | 344       |

Top of A2—860

|                      |        |     |
|----------------------|--------|-----|
| Guelph-Lockport..... | 919    | 358 |
| Rochester.....       | 1,277  | 22  |
| Irondequoit.....     | 1,299  | 10  |
| Reynales.....        | 1,309  | 7   |
| Thorold.....         | 1,316  | 7   |
| Grimsby.....         | 1,323  | 30  |
| Total Depth.....     | 1,353' |     |

Geologist: W. E. Koepke.

Water

Gas

Sulphur at 936'.

Shows at 936', 1,346' and 1,353'.

OKO-LAKE ERIE No. 54-8

Lake Erie.

Co-ordinates: 42° 34' 23" N., 80° 12' 05" W.  
Elevation: 572' + 6' D.F.  
Driller: Culver Drilling Co.  
Completed: July 10, 1963.  
Result: Gas Producer.  
Reported Flow: 360 Mcf/d. WHP. 670 psig.

| Formation            | Top     | Thickness |
|----------------------|---------|-----------|
| Lake.....            | 6       | 7         |
| Drift.....           | 13      | 292       |
| Dundee.....          | 305     | 43        |
| Bois Blanc.....      | 348     | 150       |
| Bass Island.....     | 498     | 97        |
| Salina.....          | 595     | 339       |
| Top of A2—878        |         |           |
| Guelph-Lockport..... | 934     | 324       |
| Rochester.....       | 1,258   | 40        |
| Irondequoit.....     | 1,298   | 6         |
| Reynales.....        | 1,304   | 6         |
| Thorold.....         | 1,310   | 10        |
| Grimsby.....         | 1,320   | 29        |
| Cabot Head.....      | 1,349   | 22        |
| Total Depth.....     | 1,371'. |           |

Geologist: W. E. Koepke.

| Water            | Gas                           |
|------------------|-------------------------------|
| Sulphur at 328'. | At 1,323', 1,343' and 1,360'. |

OKO-LAKE ERIE No. 54-10

Lake Erie.

Co-ordinates: 42° 34' 22.6" N., 80° 14' 27.3" W.  
Elevation: 572' + 6' D.F.  
Driller: Culver Drilling Co.  
Completed: September 27, 1963.  
Result: Abandoned.

| Formation            | Top     | Thickness |
|----------------------|---------|-----------|
| Lake.....            | 6       | 2         |
| Drift.....           | 8       | 280       |
| Dundee.....          | 288     | 62        |
| Bois Blanc.....      | 350     | 142       |
| Bass Island.....     | 492     | 92        |
| Salina.....          | 584     | 328       |
| Top of A2—865        |         |           |
| Guelph-Lockport..... | 912     | 362       |
| Rochester.....       | 1,274   | 34        |
| Irondequoit.....     | 1,308   | 7         |
| Reynales.....        | 1,315   | 4         |
| Thorold.....         | 1,319   | 9         |
| Grimsby.....         | 1,328   | 32        |
| Total Depth.....     | 1,360'. |           |

Geologist: W. E. Koepke.

| Water          |
|----------------|
| Fresh at 293'. |

OKO-LAKE ERIE No. 54-9

Lake Erie.

Co-ordinates: 42° 34' 23.8" N., 80° 13' 15.7" W.  
Elevation: 572' + 6' D.F.  
Driller: Culver Drilling Co.  
Completed: September 6, 1963.  
Result: Abandoned.  
Reported Flow: 55 Mcf/d. WHP. 600 psig.

| Formation            | Top     | Thickness |
|----------------------|---------|-----------|
| Lake.....            | 6       | 10        |
| Drift.....           | 16      | 283       |
| Dundee.....          | 299     | 61        |
| Bois Blanc.....      | 360     | 146       |
| Bass Island.....     | 506     | 86        |
| Salina.....          | 592     | 324       |
| Top of A2—865        |         |           |
| Guelph-Lockport..... | 916     | 346       |
| Rochester.....       | 1,262   | 35        |
| Irondequoit.....     | 1,297   | 6         |
| Reynales.....        | 1,303   | 5         |
| Thorold.....         | 1,308   | 8         |
| Grimsby.....         | 1,316   | 42        |
| Cabot Head.....      | 1,358   | 22        |
| Total Depth.....     | 1,388'. |           |

Geologist: W. E. Koepke.

| Water           | Gas             |
|-----------------|-----------------|
| Salt at 1,320'. | Show at 1,320'. |

OKO-LAKE ERIE No. 39-11

Lake Erie.

Co-ordinates: 42° 35' 16" N., 80° 11' 23" W.  
Elevation: 572' + 5' D.F.  
Driller: Culver Drilling Co.  
Completed: July 23, 1963.  
Result: Gas Producer.  
Reported Flow: 804 Mcf/d. WHP. 640 psig.

| Formation            | Top     | Thickness |
|----------------------|---------|-----------|
| Lake.....            | 5       | 2         |
| Drift.....           | 7       | 233       |
| Dundee.....          | 240     | 80        |
| Bois Blanc.....      | 320     | 153       |
| Bass Island.....     | 473     | 102       |
| Salina.....          | 575     | 343       |
| Top of A2—863        |         |           |
| Guelph-Lockport..... | 918     | 312       |
| Rochester.....       | 1,230   | 38        |
| Irondequoit.....     | 1,268   | 6         |
| Reynales.....        | 1,274   | 6         |
| Grimsby.....         | 1,280   | 48        |
| Cabot Head.....      | 1,328   | 23        |
| Total Depth.....     | 1,351'. |           |

Geologist: W. E. Koepke.

| Water            | Gas                           |
|------------------|-------------------------------|
| Sulphur at 422'. | Show at 421'.                 |
|                  | At 1,320', 1,321' and 1,351'. |

OKO-LAKE ERIE No. 39-12  
Lake Erie.

Co-ordinates: 42° 35' 15.9" N., 80° 12' 04.3" W.  
Elevation: 572' + 6' D.F. Driller: Culver Drilling Co.  
Completed: August 22, 1963. Result: Gas Producer.  
Reported Flow: 480 Mcf/d. WHP. 640 psig.

| Formation            | Top    | Thickness |
|----------------------|--------|-----------|
| Lake.....            | 6      | 24        |
| Drift.....           | 30     | 251       |
| Dundee.....          | 281    | 69        |
| Bois Blanc.....      | 350    | 136       |
| Bass Island.....     | 486    | 112       |
| Salina.....          | 598    | 342       |
| Top of A2—875        |        |           |
| Guelph-Lockport..... | 940    | 294       |
| Rochester.....       | 1,234  | 28        |
| Irondequoit.....     | 1,262  | 10        |
| Reynales.....        | 1,272  | 10        |
| Thorold.....         | 1,282  | 10        |
| Grimsby.....         | 1,292  | 47        |
| Cabot Head.....      | 1,339  | 6         |
| Total Depth.....     | 1,345' |           |

Geologist: W. E. Koepke.

Water Gas At 1,286', 1,297' to 1,308'  
Sulphur at 285' and 1,345' to 1,393'.

OKO-LAKE ERIE No. 30-13  
Lake Erie.

Co-ordinates: 42° 35' 09.7" N., 80° 09' 46.7" W.  
Elevation: 572' + 6' D.F. Driller: Culver Drilling Co.  
Completed: October 24, 1963. Result: Gas Producer.  
Reported Flow: 122 Mcf/d. WHP. 650 psig.

| Formation            | Top    | Thickness |
|----------------------|--------|-----------|
| Lake.....            | 6      | 2         |
| Drift.....           | 8      | 278       |
| Dundee.....          | 286    | 62        |
| Bois Blanc.....      | 348    | 126       |
| Bass Island.....     | 474    | 102       |
| Salina.....          | 576    | 331       |
| Top of A2—850        |        |           |
| Guelph-Lockport..... | 907    | 327       |
| Rochester.....       | 1,234  | 32        |
| Irondequoit.....     | 1,266  | 4         |
| Reynales.....        | 1,270  | 6         |
| Thorold.....         | 1,276  | 6         |
| Grimsby.....         | 1,282  | 42        |
| Cabot Head.....      | 1,324  | 18        |
| Total Depth.....     | 1,342' |           |

Geologist: W. E. Koepke.

Water Fresh at 295'. Gas At 1,286' to 1,325'.

OKO-LAKE ERIE No. 52-14  
Lake Erie.

Co-ordinates: 42° 34' 23.1" N., 80° 09' 42.2" W.  
Elevation: 572' + 6' D.F. Driller: Culver Drilling Co.  
Completed: October 21, 1963. Result: Abandoned.

| Formation            | Top    | Thickness |
|----------------------|--------|-----------|
| Lake.....            | 6      | 4         |
| Drift.....           | 10     | 289       |
| Dundee.....          | 299    | 49        |
| Bois Blanc.....      | 348    | 138       |
| Bass Island.....     | 486    | 94        |
| Salina.....          | 580    | 340       |
| Top of A2—870        |        |           |
| Guelph-Lockport..... | 920    | 350       |
| Rochester.....       | 1,270  | 32        |
| Irondequoit.....     | 1,302  | 6         |
| Reynales.....        | 1,308  | 8         |
| Thorold.....         | 1,316  | 6         |
| Grimsby.....         | 1,322  | 52        |
| Cabot Head.....      | 1,374  | 7         |
| Total Depth.....     | 1,381' |           |

Geologist: W. E. Koepke.

Water Fresh at 120'. Gas Show at 320'.  
Mineral at 320'.

OKO-LAKE ERIE No. 52-15  
Lake Erie.

Co-ordinates: 42° 34' 22.7" N., 80° 09' 07.1" W.  
Elevation: 572' + 6' D.F. Driller: Culver Drilling Co.  
Completed: October 2, 1963.  
Result: Gas Producer.  
Reported Flow: 108 Mcf/d. WHP. 560 psig.

| Formation            | Top    | Thickness |
|----------------------|--------|-----------|
| Lake.....            | 6      | 3         |
| Drift.....           | 9      | 290       |
| Dundee.....          | 299    | 61        |
| Bois Blanc.....      | 360    | 120       |
| Bass Island.....     | 480    | 89        |
| Salina.....          | 569    | 335       |
| Top of A2—852        |        |           |
| Guelph-Lockport..... | 904    | 361       |
| Rochester.....       | 1,265  | 36        |
| Irondequoit.....     | 1,301  | 8         |
| Reynales.....        | 1,309  | 7         |
| Thorold.....         | 1,316  | 3         |
| Grimsby.....         | 1,319  | 43        |
| Cabot Head.....      | 1,362  | 23        |
| Total Depth.....     | 1,385' |           |

Geologist: W. E. Koepke.

Water Gas At 1,330' and 1,385'.  
Fresh at 307'.

CARL ROBERTS No. 1—DOCKER No. 1  
Middleton tp., lot 20, con. I S. T. R.

Co-ordinates: 600' N., 400' W.  
Elevation: 772' + 4'.  
Driller: D. Irving.  
Completed: January 29, 1963.  
Result: Gas Producer.  
Reported Flow: 250 Mcf/d. WHP. 560 psig.

| Formation          | Top | Thickness |
|--------------------|-----|-----------|
| Drift.....         | 4   | 191       |
| Delaware.....      | 195 | 59        |
| Columbus.....      | 254 | 21        |
| Detroit River..... | 275 | 98        |
| Bois Blanc.....    | 373 | 99        |
| Bass Island.....   | 472 | 70        |
| Salina.....        | 542 | 337       |

Top of A2—795

|                      |       |     |
|----------------------|-------|-----|
| Guelph-Lockport..... | 879   | 270 |
| Rochester.....       | 1,149 | 40  |
| Reynales.....        | 1,189 | 21  |
| Cabot Head.....      | 1,210 | 80  |
| Manitowlin.....      | 1,290 | 16  |
| Queenston.....       | 1,306 | 600 |
| Meaford-Dundas.....  | 1,906 | 566 |
| Collingwood.....     | 2,472 | 157 |
| Cobourg.....         | 2,629 | 186 |
| Sherman Fall.....    | 2,815 | 125 |
| Kirkfield.....       | 2,940 | 146 |
| Coboconk.....        | 3,086 | 10  |
| Gull River.....      | 3,096 | 271 |
| Shadow Lake.....     | 3,367 | 8   |
| Eau Claire.....      | 3,375 | 118 |
| Mount Simon.....     | 3,493 | 19  |

Total Depth..... 3,512'.  
Plugged back Total Depth..... 1,230'.

Geologist: W. E. Koepke.

Water Gas Oil  
Fresh at 242'. At 1,204' to 1,212'. Show at 3,403' to  
Sulphur at 486'. Show at 3,418' to 3,404'.  
Salt at 3,422'. 3,422'.

CARL ROBERTS No. 3  
Middleton tp., lot 23, con. II S.T.R.

Co-ordinates: 1,850' S. along W.L.L., 120' E.  
Elevation: 765' + 4'.  
Driller: D. Irving.  
Completed: August 1, 1963.  
Result: Abandoned.

| Formation            | Top     | Thickness |
|----------------------|---------|-----------|
| Drift.....           | 4       | 189       |
| Delaware.....        | 193     | 75        |
| Columbus.....        | 268     | 82        |
| Bois Blanc.....      | 350     | 123       |
| Bass Island.....     | 473     | 42        |
| Salina.....          | 515     | 368       |
| Top of A2—805        |         |           |
| Top of A1—866        |         |           |
| Guelph-Lockport..... | 883     | 252       |
| Rochester.....       | 1,135   | 47        |
| Irondequoit.....     | 1,182   | 10        |
| Reynales.....        | 1,192   | 5         |
| Thorold.....         | 1,197   | 9         |
| Cabot Head.....      | 1,206   | 72        |
| Manitoulin.....      | 1,278   | 18        |
| Queenston.....       | 1,296   | 607       |
| Meaford-Dundas.....  | 1,903   | 557       |
| Collingwood.....     | 2,460   | 170       |
| Cobourg.....         | 2,630   | 170       |
| Sherman Fall.....    | 2,800   | 128       |
| Kirkfield.....       | 2,928   | 167       |
| Coboconk.....        | 3,095   | 73        |
| Gull River.....      | 3,168   | 206       |
| Shadow Lake.....     | 3,374   | 8         |
| Eau Claire.....      | 3,382   | 29        |
| Total Depth.....     | 3,411'. |           |

Geologist: W. E. Koepke.

| Water                     | Gas              |
|---------------------------|------------------|
| Fresh at 195'.            | Shows at 1,195'. |
| Sulphur at 478' and 868'. | 1,955 to 1,960'  |
| Salt at 3,395 and 3,411'. | and 2,420'.      |

CANADIAN ESSEX—ROBBINS No. 1  
South Walsingham tp., lot 11, con. II.

Co-ordinates: 150' S., 150' E.  
Elevation: 662' + 2'.  
Driller: Culver Drilling Co.  
Completed: November 28, 1963.  
Result: Abandoned.

| Formation            | Top     | Thickness |
|----------------------|---------|-----------|
| Drift.....           | 2       | 325       |
| Delaware.....        | 327     | 133       |
| Bois Blanc.....      | 460     | 162       |
| Bass Island.....     | 622     | 68        |
| Salina.....          | 690     | 360       |
| Top of A2—980        |         |           |
| Guelph-Lockport..... | 1,050   | 216       |
| Rochester.....       | 1,266   | 72        |
| Irondequoit.....     | 1,338   | 4         |
| Reynales.....        | 1,342   | 7         |
| Thorold.....         | 1,349   | 12        |
| Grimsby.....         | 1,361   | 17        |
| Cabot Head.....      | 1,378   | 75        |
| Manitoulin.....      | 1,453   | 15        |
| Whirlpool.....       | 1,468   | 5         |
| Total Depth.....     | 1,473'. |           |

Geologist: W. E. Koepke.

| Water              | Gas                       |
|--------------------|---------------------------|
| Fresh at 335'.     | Show at 1,362' to 1,385'. |
| Sulphur at 1,055'. |                           |

B-F & ASSOCIATES No. 1  
Townsend tp., lot 2, con. X.

Co-ordinates: 300' S., along E.L.L., 500' W.  
Elevation: 770' + 1'.  
Driller: S. Lyons and Son.  
Completed: April 18, 1963.  
Result: Abandoned.

| Formation                 | Top                   | Thickness |
|---------------------------|-----------------------|-----------|
| Drift.....                | 1                     | 123       |
| Bois Blanc.....           | 124                   | 50        |
| Bass Island.....          | 174                   | 51        |
| Salina.....               | 225                   | 340       |
| Top of A2—517             |                       |           |
| Guelph-Lockport.....      | 565                   | 313       |
| Rochester.....            | 878                   | 37        |
| Irondequoit.....          | 915                   | 21        |
| Thorold.....              | 936                   | 5         |
| Grimsby.....              | 941                   | 18        |
| Total Depth.....          | 959'.                 |           |
| Geologist: W. E. Koepke.  |                       |           |
| Water                     | Gas                   |           |
| Fresh at 133'.            | Shows at 921' to 933' |           |
| Sulphur at 186' and 475'. | and 941' to 947'.     |           |

KENT MASON No. 1  
Townsend tp., lot 2, con. IX.

Co-ordinates: 2,229' N., 950' W.  
Elevation: 757' + 1'.  
Driller: S. Lyons and Son.  
Completed: June 20, 1963.  
Result: Gas Producer.  
Reported Flow: 23 Mcf/d. WHP. 410 psig.

| Formation                | Top              | Thickness |
|--------------------------|------------------|-----------|
| Drift.....               | 1                | 120       |
| Bois Blanc.....          | 121              | 36        |
| Bass Island.....         | 157              | 51        |
| Salina.....              | 208              | 324       |
| Top of A2—480            |                  |           |
| Guelph-Lockport.....     | 532              | 310       |
| Rochester.....           | 840              | 51        |
| Poor samples.....        | 893              | 22        |
| Cabot Head.....          | 915              | 26        |
| Total Depth.....         | 941'.            |           |
| Geologist: W. E. Koepke. |                  |           |
| Water                    | Gas              |           |
| Fresh at 123'.           | At 903' to 908'. |           |
| Sulphur at 200'.         |                  |           |

KENT MASON No. 2  
Townsend tp., lot 2, con. IX.

Co-ordinates: 800' S. along W.L.L., 555' E.  
Elevation: 759' + 1'.  
Driller: S. Lyons & Son.  
Completed: July 16, 1963.  
Result: Abandoned.

| Formation                | Top           | Thickness |
|--------------------------|---------------|-----------|
| Drift.....               | 1             | 102       |
| Bois Blanc.....          | 103           | 36        |
| Bass Island.....         | 139           | 47        |
| Salina.....              | 186           | 341       |
| Top of A2—475            |               |           |
| Guelph-Lockport.....     | 527           | 322       |
| Rochester.....           | 849           | 41        |
| Irondequoit.....         | 890           | 5         |
| Reynales.....            | 895           | 3         |
| Thorold.....             | 898           | 27        |
| Cabot Head.....          | 925           | 15        |
| Total Depth.....         | 940'.         |           |
| Geologist: W. E. Koepke. |               |           |
| Water                    | Gas           |           |
| Fresh at 105'.           | Show at 904'. |           |
| Sulphur at 154'.         |               |           |

## KENT MASON No. 3

Townsend tp., lot 2, con. IX.

Co-ordinates: 1,200' S., 35' W.  
 Elevation: 758' + 1'.  
 Driller: S. Lyons and Son.  
 Completed: October 4, 1963.  
 Result: Abandoned.

| Formation                     | Top    | Thickness |
|-------------------------------|--------|-----------|
| Drift.....                    | 1      | 119       |
| Bois Blanc.....               | 120    | 40        |
| Bass Island.....              | 160    | 64        |
| Salina.....                   | 224    | 316       |
| Top of A2—475                 |        |           |
| Guelph-Lockport.....          | 540    | 310       |
| Rochester.....                | 850    | 40        |
| Irondequoit and Reynales..... | 890    | 20        |
| Grimsby.....                  | 910    | 40        |
| Cabot Head.....               | 950    | 32        |
| Manitoulin.....               | 982    | 24        |
| Queenston.....                | 1,006  | 4         |
| Total Depth.....              | 1,010' |           |

Geologist: W. E. Koepke.

Water  
 Fresh at 121'.  
 Sulphur at 160'.  
 Gas  
 Show at 891'.

## B-F &amp; ASSOCIATES No. 3

Windham tp., lot 19, con. XII.

Co-ordinates: 350' S., 534' E.  
 Elevation: 789' + 4'.  
 Driller: D. Irving.  
 Completed: August 15, 1963.  
 Result: Gas Producer.  
 Reported Flow: 483 Mcf/d. WHP. 505 psig.

| Formation            | Top    | Thickness |
|----------------------|--------|-----------|
| Drift.....           | 4      | 174       |
| Delaware.....        | 178    | 41        |
| Columbus.....        | 219    | 45        |
| Bois Blanc.....      | 264    | 102       |
| Bass Island.....     | 366    | 44        |
| Salina.....          | 410    | 364       |
| Top of A2—705        |        |           |
| Guelph-Lockport..... | 774    | 236       |
| Rochester.....       | 1,010  | 48        |
| Irondequoit.....     | 1,058  | 7         |
| Reynales.....        | 1,065  | 9         |
| Thorold.....         | 1,074  | 19        |
| Grimsby.....         | 1,093  | 4         |
| Cabot Head.....      | 1,097  | 20        |
| Total Depth.....     | 1,117' |           |

Geologist: W. E. Koepke.

Water  
 Fresh at 189'.  
 Sulphur 358'.  
 Gas  
 At 1,075' to 1,086'.

## B-F &amp; ASSOCIATES No. 2

Windham tp., lot 20, con. XII.

Co-ordinates: 517' N., along W.L.L., 650' E.  
 Elevation: 788' + 2'.  
 Driller: S. Lyons and Son.  
 Completed: July 12, 1963.  
 Result: Abandoned.

| Formation            | Top    | Thickness |
|----------------------|--------|-----------|
| Drift.....           | 2      | 151       |
| Dundee.....          | 153    | 72        |
| Columbus.....        | 225    | 23        |
| Detroit River.....   | 248    | 32        |
| Bois Blanc.....      | 280    | 95        |
| Bass Island.....     | 375    | 59        |
| Salina.....          | 434    | 354       |
| Top of A2—725        |        |           |
| Guelph-Lockport..... | 788    | 219       |
| Rochester.....       | 1,007  | 58        |
| Irondequoit.....     | 1,065  | 10        |
| Reynales.....        | 1,075  | 5         |
| Thorold.....         | 1,080  | 20        |
| Cabot Head.....      | 1,100  | 73        |
| Manitoulin.....      | 1,173  | 12        |
| Whirlpool.....       | 1,185  | 2         |
| Queenston.....       | 1,187  | 5         |
| Total Depth.....     | 1,192' |           |

Geologist: W. E. Koepke.

Water  
 Fresh at 174'.  
 Sulphur at 378'.

## B-F &amp; ASSOCIATES No. 4

Windham tp., lot 19, con. XII.

Co-ordinates: 1,450' S., 500' E.  
 Elevation: 789' + 3'.  
 Driller: D. Irving.  
 Completed: October 23, 1963.  
 Result: Gas Producer.  
 Reported Flow: 7 Mcf/d. WHP. 360 psig.

| Formation            | Top    | Thickness |
|----------------------|--------|-----------|
| Drift.....           | 3      | 170       |
| Dundee.....          | 173    | 48        |
| Columbus.....        | 221    | 31        |
| Bois Blanc.....      | 252    | 115       |
| Bass Island.....     | 367    | 55        |
| Salina.....          | 422    | 334       |
| Top of A2—690        |        |           |
| Guelph-Lockport..... | 756    | 254       |
| Rochester.....       | 1,010  | 59        |
| Irondequoit.....     | 1,069  | 11        |
| Reynales.....        | 1,080  | 7         |
| Thorold.....         | 1,087  | 12        |
| Cabot Head.....      | 1,099  | 66        |
| Manitoulin.....      | 1,165  | 21        |
| Whirlpool.....       | 1,186  | 4         |
| Queenston.....       | 1,190  | 7         |
| Total Depth.....     | 1,197' |           |

Geologist: W. E. Koepke.

Water  
 Fresh at 191'.  
 Sulphur at 570'.  
 Gas  
 At 1,097' to 1,101'.

B-F & ASSOCIATES No. 5

Windham tp., lot 18, con. XII.

Co-ordinates: 500' S., 500' E.  
Elevation: 776' + 1'.  
Driller: Mandley Drilling Contractors, Ltd.  
Completed: November 15, 1963.  
Result: Gas Producer.  
Reported Flow: 775 Mcf/d. WHP. 520 psig.

| Formation            | Top    | Thickness |
|----------------------|--------|-----------|
| Drift.....           | 1      | 149       |
| Dundee.....          | 150    | 35        |
| Columbus.....        | 185    | 15        |
| Bois Blanc.....      | 200    | 102       |
| Bass Island.....     | 302    | 40        |
| Salina.....          | 342    | 370       |
| Top of A2—652        |        |           |
| Guelph-Lockport..... | 712    | 276       |
| Rochester.....       | 988    | 53        |
| Irondequoit.....     | 1,041  | 8         |
| Reynales.....        | 1,049  | 5         |
| Thorold.....         | 1,054  | 21        |
| Cabot Head.....      | 1,075  | 25        |
| Total Depth:.....    | 1,100' |           |

Geologist: W. E. Koepke.

Water Gas  
Fresh at 155'. At 1,056' to 1,074'.  
Sulphur at 190'.

B-F & ASSOCIATES No. 6

Windham tp., lot 19, con. XII.

Co-ordinates: 500' S. along E. L.L., 500' W.  
Elevation: 780' + 3'.  
Driller: D. Irving.  
Completed: November 24, 1963.  
Result: Gas Producer.  
Reported Flow: 70 Mcf/d. WHP. 520 psig.

| Formation            | Top    | Thickness |
|----------------------|--------|-----------|
| Drift.....           | 3      | 153       |
| Dundee.....          | 156    | 48        |
| Columbus.....        | 204    | 16        |
| Bois Blanc.....      | 220    | 116       |
| Bass Island.....     | 336    | 60        |
| Salina.....          | 396    | 339       |
| Top of A2—677        |        |           |
| Guelph-Lockport..... | 735    | 263       |
| Rochester.....       | 998    | 55        |
| Irondequoit.....     | 1,053  | 10        |
| Reynales.....        | 1,063  | 8         |
| Thorold.....         | 1,071  | 12        |
| Grimsby.....         | 1,083  | 3         |
| Cabot Head.....      | 1,086  | 19        |
| Total Depth:.....    | 1,105' |           |

Geologist: W. E. Koepke.

Water Gas  
Fresh at 170'. At 1,069' to 1,079'.  
Sulphur at 345'.

STOVER No. 1

Windham tp., lot 15, con. IX.

Co-ordinates: 450' N., 550' W.  
Elevation: 786' + 2'.  
Driller: S. Lyons & Son.  
Completed: May 16, 1963.  
Result: Abandoned.

| Formation            | Top    | Thickness |
|----------------------|--------|-----------|
| Drift.....           | 2      | 130       |
| Dundee.....          | 132    | 25        |
| Columbus.....        | 157    | 23        |
| Detroit River.....   | 180    | 30        |
| Bois Blanc.....      | 210    | 82        |
| Bass Island.....     | 292    | 53        |
| Salina.....          | 345    | 318       |
| Top of A2—610        |        |           |
| Guelph-Lockport..... | 663    | 294       |
| Rochester.....       | 957    | 50        |
| Irondequoit.....     | 1,007  | 8         |
| Reynales.....        | 1,015  | 5         |
| Thorold.....         | 1,020  | 15        |
| Grimsby.....         | 1,035  | 4         |
| Cabot Head.....      | 1,039  | 11        |
| Total Depth:.....    | 1,050' |           |

Geologist: W. E. Koepke.

Water Gas  
Fresh at 134' and 170'. Show at 1,030' to 1,035'.  
Sulphur at 290'.

STOVER No. 2

Windham tp., lot 9, con. VIII.

Co-ordinates: 2,280' S. along W. L.L., 825' E.  
Elevation: 780' + 1'.  
Driller: S. Lyons & Son.  
Completed: August 28, 1963.  
Result: Gas Producer.  
Reported Flow: 85 Mcf/d. WHP. 420 psig.

| Formation            | Top  | Thickness |
|----------------------|------|-----------|
| Drift.....           | 1    | 131       |
| Bois Blanc.....      | 132  | 76        |
| Bass Island.....     | 208  | 44        |
| Salina.....          | 252  | 306       |
| Top of A2—508        |      |           |
| Guelph-Lockport..... | 558  | 342       |
| Rochester.....       | 900  | 44        |
| Irondequoit.....     | 944  | 10        |
| Reynales.....        | 954  | 6         |
| Thorold.....         | 960  | 8         |
| Grimsby.....         | 968  | 4         |
| Cabot Head.....      | 972  | 14        |
| Total Depth:.....    | 986' |           |

Geologist: W. E. Koepke.

Water Gas  
Fresh at 134' and 200'. At 957' to 966'.

LLOYD VANDERBURG No. 6

Windham tp., lot 1, con. XIII.

Co-ordinates: 462' N. of c/1, 552' W.  
Elevation: 717' + 1'.  
Driller: H. V. Nauman.  
Completed: February 18, 1963.  
Result: Source Well. (Unchanged)

Previously drilled (1961) to depth of 3,251' from Elevation 717' + 1'.

| Formation                       | Top    | Thickness |
|---------------------------------|--------|-----------|
| Cambrian (1961).....            | 3,235  | 16        |
| DEEPENING                       |        |           |
| Cambrian (continued, 1963)..... | 3,251  | 135       |
| Precambrian.....                | 3,386  | 15        |
| Total Depth:.....               | 3,401' |           |

Geologist: W. E. Koepke.

WAKEHAM BAY MINES-No. 3  
Blandford tp., lot 3, con. V.

Co-ordinates: 2,750' N., 495' W.  
Elevation: 958' + 4'.  
Driller: W. Kiser.  
Completed: January 10, 1963.  
Result: Oil show, suspended.

| Formation                         | Top    | Thickness |
|-----------------------------------|--------|-----------|
| Drift.....                        | 4      | 151       |
| Salina.....                       | 155    | 261       |
| Top of A2—340                     |        |           |
| Top of A1—406                     |        |           |
| Guelph-Lockport.....              | 416    | 366       |
| Rochester.....                    | 782    | 44        |
| Irondequoit.....                  | 826    | 10        |
| Reynales.....                     | 836    | 18        |
| Cabot Head.....                   | 854    | 46        |
| Manitoulin.....                   | 900    | 24        |
| Whirlpool.....                    | 924    | 9         |
| Queenston.....                    | 933    | 467       |
| Meaford-Dundas and Collingwood... | 1,400  | 723       |
| Trenton.....                      | 2,123  | 503       |
| Black River.....                  | 2,626  | 242       |
| Cambrian.....                     | 2,868  | 10        |
| Arkose.....                       | 2,878  | 3         |
| Precambrian.....                  | 2,881  | 8         |
| Total Depth.....                  | 2,889' |           |

Geologist: B. V. Sanford and G. Peterson.

| Water            | Gas                   | Oil                       |
|------------------|-----------------------|---------------------------|
| Fresh at 139'.   | Show at 812' to 820'. | Show at 2,967' to 2,980'. |
| Sulphur at 203'. |                       |                           |

A. D. BARNETT No. 1  
Dereham tp., lot 20, con. V.

Co-ordinates: 1,700' S., 500' E.  
Elevation: 903' + 2'.  
Driller: R. McMaster & Sons Co., Ltd.  
Completed: July 1, 1963.  
Result: Oil Producer.  
Reported Flow: 10 bbl/d.

| Formation            | Top    | Thickness |
|----------------------|--------|-----------|
| Drift.....           | 2      | 158       |
| Delaware.....        | 160    | 145       |
| Columbus.....        | 305    | 15        |
| Detroit River.....   | 320    | 46        |
| Bois Blanc.....      | 366    | 95        |
| Bass Island.....     | 461    | 54        |
| Salina.....          | 515    | 401       |
| Top of A2—825        |        |           |
| Top of A1—891        |        |           |
| Guelph-Lockport..... | 916    | 261       |
| Rochester.....       | 1,177  | 48        |
| Irondequoit.....     | 1,225  | 10        |
| Reynales.....        | 1,235  | 13        |
| Cabot Head.....      | 1,248  | 58        |
| Manitoulin.....      | 1,306  | 37        |
| Queenston.....       | 1,343  | 552       |
| Meaford-Dundas.....  | 1,895  | 560       |
| Collingwood.....     | 2,455  | 89        |
| Cobourg.....         | 2,544  | 196       |
| Sherman Fall.....    | 2,740  | 148       |
| Kirkfield.....       | 2,888  | 140       |
| Gull River.....      | 3,028  | 285       |
| Shadow Lake.....     | 3,313  | 7         |
| Eau Claire.....      | 3,320  | 19        |
| Precambrian.....     | 3,339  | 5         |
| Total Depth.....     | 3,344' |           |

Geologist: W. E. Koepke.

| Water            | Oil                  |
|------------------|----------------------|
| Fresh at 90'.    | At 3,330' to 3,339'. |
| Sulphur at 186'. |                      |

McMASTER No. 22-GOBLES 18  
Blenheim tp., lot 20, con. I.

Co-ordinates: 605' N., 500' E.  
Elevation: 932' G.E.  
Driller: R. McMaster & Sons Co., Ltd.  
Completed: February 1, 1963.  
Result: Oil Producer.  
Reported Flow: 40 bbl/d.

| Formation                         | Top    | Thickness |
|-----------------------------------|--------|-----------|
| Drift.....                        | 0      | 115       |
| Salina.....                       | 115    | 324       |
| Top of A2—385                     |        |           |
| Top of A1—429                     |        |           |
| Guelph-Lockport.....              | 439    | 333       |
| Rochester.....                    | 772    | 46        |
| Reynales.....                     | 818    | 10        |
| Thorold.....                      | 828    | 12        |
| Cabot Head.....                   | 840    | 52        |
| Manitoulin.....                   | 892    | 26        |
| Whirlpool.....                    | 918    | 8         |
| Queenston.....                    | 926    | 471       |
| Meaford-Dundas and Collingwood... | 1,397  | 749       |
| Trenton.....                      | 2,146  | 500       |
| Black River.....                  | 2,646  | 246       |
| Eau Claire.....                   | 2,892  | 25        |
| Precambrian.....                  | 2,917  | 1         |
| Total Depth.....                  | 2,918' |           |

Geologist: B. V. Sanford.

| Water                         | Oil                  |
|-------------------------------|----------------------|
| Fresh at 140', 185' and 228'. | At 2,899' to 2,915'. |

IMPERIAL No. 842

North Norwich tp., lot 4, con. II.

Co-ordinates: 1,540' S., 594' W.  
Elevation: 862' + 4'.  
Driller: Stubble and Stubble.  
Completed: April 16, 1963.  
Result: Abandoned.

| Formation            | Top    | Thickness |
|----------------------|--------|-----------|
| Drift.....           | 4      | 59        |
| Bois Blanc.....      | 63     | 68        |
| Bass Island.....     | 131    | 37        |
| Salina.....          | 168    | 343       |
| Top of A2—447        |        |           |
| Guelph-Lockport..... | 511    | 379       |
| Rochester.....       | 890    | 43        |
| Reynales.....        | 933    | 17        |
| Cabot Head.....      | 950    | 55        |
| Manitoulin.....      | 1,005  | 35        |
| Whirlpool.....       | 1,040  | 2         |
| Queenston.....       | 1,042  | 494       |
| Meaford-Dundas.....  | 1,536  | 640       |
| Collingwood.....     | 2,176  | 134       |
| Cobourg.....         | 2,310  | 185       |
| Sherman Fall.....    | 2,495  | 139       |
| Kirkfield.....       | 2,634  | 148       |
| Gull River.....      | 2,782  | 263       |
| Shadow Lake.....     | 3,045  | 4         |
| Eau Claire.....      | 3,049  | 20        |
| Precambrian.....     | 3,069  | 2         |
| Total Depth.....     | 3,071' |           |

Geologist: W. E. Koepke.

| Water                 | Gas                       |
|-----------------------|---------------------------|
| Fresh at 55' and 90'. | Show at 2,522' to 2,530'. |
| Salt at 3,060'.       |                           |



CANADIAN DELHI-BLANSHARD 5-XV  
Blanshard tp., lot 5, con. XV.

Co-ordinates: 330' N., 330' W. of River Road.  
Elevation: 1,032' + 3'.  
Driller: Chevalier & Tremblay.  
Completed: March 16, 1963.  
Result: Abandoned.

| Formation                  | Top    | Thickness |
|----------------------------|--------|-----------|
| Drift.....                 | 3      | 39        |
| Dundee.....                | 42     | 40        |
| Detroit River.....         | 82     | 310       |
| Bois Blanc.....            | 392    | 138       |
| Bass Island.....           | 530    | 100       |
| Salina.....                | 630    | 407       |
| Top of A2—952              |        |           |
| Top of A1—1,018            |        |           |
| Guelph-Lockport.....       | 1,037  | 115       |
| Total Depth:.....          | 1,152' |           |
| Geologist: W. E. Koepke.   |        |           |
| Water                      |        |           |
| Fresh at 37'.              |        |           |
| Salt at 1,050' and 1,145'. |        |           |

Welland County

LINCOLN-WAINFLEET No. 8  
Wainfleet tp., lot 31, con. III.

Co-ordinates: 2,950' S., 200' E.  
Elevation: 580' + 1'.  
Driller: Culver Drilling, Ltd.  
Completed: March 9, 1963.  
Result: Gas Producer.  
Reported Flow: 10 Mcf/d. WHP. 250 psig.

| Formation                | Top                                  | Thickness |
|--------------------------|--------------------------------------|-----------|
| Drift.....               | 1                                    | 113       |
| Salina.....              | 114                                  | 226       |
| Top of A2—263            |                                      |           |
| Guelph-Lockport.....     | 340                                  | 202       |
| Rochester.....           | 542                                  | 48        |
| Irondequoit.....         | 590                                  | 8         |
| Reynales.....            | 598                                  | 34        |
| Grimsby.....             | 632                                  | 32        |
| Cabot Head.....          | 664                                  | 42        |
| Whirlpool.....           | 706                                  | 24        |
| Queenston.....           | 730                                  | 30        |
| Total Depth:.....        | 760'                                 |           |
| Geologist: W. E. Koepke. |                                      |           |
| Water                    | Gas                                  |           |
| Fresh at 114'.           | At 627' to 642' and<br>726' to 728'. |           |

WELLANDPORT GAS-No. 12  
Wainfleet tp., lot 43, con. VI.

Co-ordinates: 2,112' S. of Rd., 183' E. of Rd.  
Elevation: 588' + 1'.  
Driller: P. L. Jackson Co.  
Completed: June 29, 1963.  
Result: Gas Producer.  
Reported Flow: 33 Mcf/d. WHP. 220 psig.

| Formation                | Top              | Thickness |
|--------------------------|------------------|-----------|
| Drift.....               | 18               | 83        |
| Salina.....              | 84               | 108       |
| Top of A2—152            |                  |           |
| Guelph-Lockport.....     | 192              | 198       |
| Rochester.....           | 390              | 49        |
| Irondequoit.....         | 439              | 5         |
| Reynales.....            | 444              | 16        |
| Thorold.....             | 460              | 20        |
| Grimsby.....             | 480              | 28        |
| Cabot Head.....          | 508              | 52        |
| Whirlpool.....           | 560              | 16        |
| Queenston.....           | 576              | 42        |
| Total Depth:.....        | 618'             |           |
| Geologist: W. E. Koepke. |                  |           |
| Water                    | Gas              |           |
| Fresh at 100' and 165'.  | At 571' to 576'. |           |
| Sulphur at 280'.         |                  |           |

WELLANDPORT GAS-No. 13  
Wainfleet tp., lot 45, con. VI.

Co-ordinates: 720' N. of Rd., 350' W.  
Elevation: 587' + 1'. Driller: P. L. Jackson Co.  
Completed: July 18, 1963. Result: Gas Producer.  
Reported Flow: 10 Mcf/d. WHP. 140 psig.

| Formation                | Top                                  | Thickness |
|--------------------------|--------------------------------------|-----------|
| Drift.....               | 1                                    | 93        |
| Salina.....              | 94                                   | 124       |
| Top of A2—180            |                                      |           |
| Guelph-Lockport.....     | 218                                  | 202       |
| Rochester.....           | 420                                  | 43        |
| Irondequoit.....         | 463                                  | 5         |
| Reynales.....            | 468                                  | 14        |
| Thorold.....             | 482                                  | 18        |
| Grimsby.....             | 500                                  | 22        |
| Cabot Head.....          | 522                                  | 60        |
| Whirlpool.....           | 582                                  | 19        |
| Queenston.....           | 601                                  | 45        |
| Total Depth:.....        | 646'                                 |           |
| Geologist: W. E. Koepke. |                                      |           |
| Water                    | Gas                                  |           |
| Fresh at 94' and 97'.    | At 467' to 470' and<br>592' to 595'. |           |
| Sulphur at 286'.         |                                      |           |

WELLANDPORT GAS-No. 14  
Wainfleet tp., lot 41, con. VI.

Co-ordinates: 1,200' S., 700' E.  
Elevation: 586' + 1'. Driller: Montgomery Bros.  
Completed: August 7, 1963.  
Result: Gas Producer.  
Reported Flow: 31 Mcf/d. WHP. 220 psig.

| Formation                 | Top                                  | Thickness |
|---------------------------|--------------------------------------|-----------|
| Drift.....                | 1                                    | 115       |
| Salina.....               | 116                                  | 82        |
| Top of A2—156             |                                      |           |
| Guelph-Lockport.....      | 198                                  | 205       |
| Rochester.....            | 403                                  | 49        |
| Irondequoit.....          | 452                                  | 10        |
| Reynales.....             | 462                                  | 10        |
| Thorold.....              | 472                                  | 12        |
| Grimsby.....              | 484                                  | 20        |
| Cabot Head.....           | 504                                  | 62        |
| Whirlpool.....            | 566                                  | 14        |
| Queenston.....            | 580                                  | 50        |
| Total Depth:.....         | 630'                                 |           |
| Geologist: W. E. Koepke.  |                                      |           |
| Water                     | Gas                                  |           |
| Fresh at 96'.             | At 469' to 479' and<br>572' to 585'. |           |
| Sulphur at 158' and 236'. |                                      |           |

WELLANDPORT GAS-No. 15  
Wainfleet tp., lot 39, con. VII.

Co-ordinates: 500' N., 300' E.  
Elevation: 585' + 1'. Driller: P. L. Jackson Co.  
Completed: August 29, 1963.  
Result: Gas Producer.  
Reported Flow: 21 Mcf/d. WHP. 190 psig.

| Formation                 | Top   | Thickness |
|---------------------------|---|-----------|
| Drift.....                | 1   | 85        |
| Salina.....               | 86  | 107       |
| Top of A2—156             |   |           |
| Guelph-Lockport.....      | 193   | 193       |
| Rochester.....            | 386   | 54        |
| Irondequoit.....          | 440   | 8         |
| Reynales.....             | 448   | 12        |
| Thorold.....              | 460   | 10        |
| Grimsby.....              | 470   | 32        |
| Cabot Head.....           | 502   | 58        |
| Whirlpool.....            | 560   | 18        |
| Queenston.....            | 578   | 49        |
| Total Depth:.....         | 627'  |           |
| Geologist: W. E. Koepke.  |   |           |
| Water                     | Gas   |           |
| Fresh at 85'.             | At 443' to 445',<br>567' to 570' and<br>574' to 576'. |           |
| Sulphur at 171' and 240'. |   |           |

## WELLANDPORT GAS No. 16

Wainfleet tp., lot 41, con. VII.

Co-ordinates: 160' N., 160' E.  
 Elevation: 587' + 1'.  
 Driller: Montgomery Bros.  
 Completed: September 21, 1963.  
 Result: Gas Producer.  
 Reported Flow: 176 Mcf/d. WHP. 240 psig.

| Formation            | Top   | Thickness |
|----------------------|-------|-----------|
| Drift.....           | 1     | 101       |
| Salina.....          | 102   | 83        |
| Top of A2—142        |       |           |
| Guelph-Lockport..... | 185   | 209       |
| Rochester.....       | 394   | 46        |
| Irondequoit.....     | 440   | 14        |
| Reynales.....        | 454   | 10        |
| Thorold.....         | 464   | 10        |
| Grimsby.....         | 474   | 28        |
| Cabot Head.....      | 502   | 58        |
| Manitoulin.....      |       | Trace     |
| Whirlpool.....       | 560   | 10        |
| Queenston.....       | 570   | 55        |
| Total Depth.....     | 625'. |           |

Geologist: W. E. Koepke.

## Water

Fresh at 112'.  
 Sulphur 168'.

## Gas

At 478' to 532' and  
 567' to 575'.

## CAMPUS GAS SYNDICATE No. 4

Willoughby tp., lot 12, con. IV.

Co-ordinates: 900' S., 450' E.  
 Elevation:  
 Driller: K. F. Held & Son.  
 Completed: June 1, 1963.  
 Result: Abandoned.

| Formation                     | Top   | Thickness |
|-------------------------------|-------|-----------|
| Drift.....                    | 0     | 68        |
| Salina.....                   | 68    | 62        |
| Guelph-Lockport.....          | 130   | 220       |
| Rochester.....                | 350   | 65        |
| Irondequoit and Reynales..... | 415   | 38        |
| Grimsby.....                  | 453   | 40        |
| Cabot Head.....               | 493   | 46        |
| Whirlpool.....                | 539   | 23        |
| Queenston.....                | 562   | 13        |
| Total Depth.....              | 575'. |           |

Geologist: Driller's log.

## Water

Fresh at 120'.  
 Sulphur at 160'.

## Wentworth County

## O'KONTA OIL-No. 4

Beverly tp., lot 30, con. IV.

Co-ordinates: 330' S., 1,120' W.  
 Elevation: 826' + 2'.  
 Driller: P. L. Jackson Co.  
 Completed: January 2, 1963.  
 Result: Abandoned.

| Formation            | Top     | Thickness |
|----------------------|---------|-----------|
| Drift.....           | 2       | 4         |
| Guelph-Lockport..... | 6       | 239       |
| Cabot Head.....      | 245     | 45        |
| Manitoulin.....      | 290     | 30        |
| Whirlpool.....       | 320     | 7         |
| Queenston.....       | 327     | 511       |
| Meaford-Dundas.....  | 838     | 667       |
| Collingwood.....     | 1,505   | 167       |
| Cobourg.....         | 1,672   | 173       |
| Sherman Fall.....    | 1,845   | 157       |
| Kirkfield.....       | 2,002   | 163       |
| Coboconk.....        | 2,165   | 25        |
| Gull River.....      | 2,190   | 150       |
| Shadow Lake.....     | 2,340   | 7         |
| Precambrian.....     | 2,347   | 63        |
| Total Depth.....     | 2,410'. |           |

Geologist: W. E. Koepke.

## Water

Fresh at 31'.  
 Sulphur at 205'.  
 Salt at 322'.

## Oil

Show at 1,524' and 2,342'.

## IMPERIAL OIL No. (834)

West Flamborough tp., lot 1, con. III.

Co-ordinates: 345' S., 325' W.  
 Elevation: 820' + 5'.  
 Driller: W. Kiser.  
 Completed: January 26, 1963.  
 Result: Abandoned.

| Formation            | Top     | Thickness |
|----------------------|---------|-----------|
| Drift.....           | 5       | 7         |
| Guelph-Lockport..... | 12      | 212       |
| Cabot Head.....      | 224     | 44        |
| Manitoulin.....      | 268     | 34        |
| Whirlpool.....       | 302     | 7         |
| Queenston.....       | 309     | 569       |
| Meaford-Dundas.....  | 878     | 632       |
| Collingwood.....     | 1,510   | 194       |
| Cobourg.....         | 1,704   | 190       |
| Sherman Fall.....    | 1,894   | 152       |
| Kirkfield.....       | 2,046   | 139       |
| Gull River.....      | 2,185   | 179       |
| Shadow Lake.....     | 2,364   | 5         |
| Eau Claire.....      | 2,369   | 18        |
| Total Depth.....     | 2,387'. |           |

Geologist: W. E. Koepke.

## Water

Fresh at 28' and 45'.  
 Sulphur at 215', 910' and 1,265'.  
 Salt at 2,375'.

---

---



TERMINAL STREAM: ST. CHARLES

[illegible]

